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Financial Sector Study

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Currency Equivalents

Average 1992	=	US$1.00 = W 780.65
Average 1991	=	US$1.00 = W 733.35
Average 1990	=	US$1.00 = W 707.76
Average 1989	=	US$1.00 = W 671.46
Average 1988	=	US$1.00 = W 731.47
Average 1987	=	US$1.00 = W 822.57
Average 1986	=	US$1.00 = W 881.45

Acronyms and Abbreviations

ASEAN	-	Association of Southeast Asian Nations
BOE	-	Bank of England
BOJ	-	Bank of Japan
BOK	-	Bank of Korea
DMB	-	Deposit Money Banks
FESF	-	Foreign Exchange Stabilization Fund
GDP	-	Gross Domestic Product
GNP	-	Gross National Product
GOK	-	Government of Korea
HCI	-	Heavy and Chemical Industries
IBK	-	Industrial Bank of Korea
IMF	-	International Monetary Fund
KDB	-	Korea Development Bank
KDI	-	Korea Development Institute
KEXIM	-	Korea Export Import Bank
KIC	-	Korea Investment Corporation
KIF	-	Korea Institute of Finance
KSRI	-	Korea Securities Research Institute
MB	-	Monetary Base
MM	-	Money Multiplier
MSBs	-	Monetary Stabilization Bonds
MOF	-	Ministry of Finance
NBFIs	-	Non-bank Financial Intermediaries
NCB	-	Nationwide Commercial Bank
OBS	-	Office of Bank Supervision
OTC	-	Over-the-Counter
RRs	-	Reserve Requirements
SEC	-	Securities and Exchange Commission
SMEs	-	Small- and Medium-Sized Enterprises
W	-	Won

KOREA

FINANCIAL SECTOR STUDY

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Preface

This report has been prepared by a Bank mission that visited Korea from September 22 to October 22, 1992. The mission members included Ismail Dalla (chief), Kwang Jun, Deena Khatkhate, Sudhir Shetty, Andrew Sheng from the Bank and James Meigs and Martin Edmonds as consultants. Rebecca Sekse from EA1IE also contributed to this report. Discussions were held with the Korean delegation in Washington during January 26-27, 1993. The Korean delegation was headed by Dr. Bong-Sung Oum, Counselor to the Minister of Finance, and included Mr. Chang-Lok Kim, Director, International Finance Division, Mr. Kyung Wook Hur, Senior Deputy Director, International Finance Division, and Dr. Woosik Chu, Senior Deputy Director, Domestic Finance Division. The Bank team was headed by Danny Leipziger, Lead Economist, and included Ismail Dalla and the study team.

The mission benefitted from the written contributions made by the three Korean research institutions: the Korea Development Institute (KDI), the Korea Securities Research Institute (KSRI), and the Korea Institute of Finance (KIF). The mission would like to express its special thanks in particular to Assistant Minister Hwan-Kyhun Lee, Mr. Man Soo Kang, and Mr. Chang-Lok Kim from the MOF for their help and advice. Special thanks are also due to Governor Cho Soon and the senior staff of the Bank of Korea for very constructive discussions on the financial sector. The mission is also grateful to the courtesy and close cooperation extended to the mission by the senior officials of the major financial institutions.

On July 2, 1993 the Government of Korea (GOK) announced its plan for financial sector reform as part of the New Five Year Economic Plan (1993-98). Specific areas covered under the reform program are: (i) interest rate liberalization; (ii) autonomy of management of banks; (iii) reform of policy loans (directed credits); (iv) management of monetary policy; (v) bank supervision; and (vi) opening of the capital account. In addition, the GOK has proposed a series of measures to modernize the infrastructure of the financial markets, increase the scope of financial institutions by allowing financial institutions into new lines of business, broaden ownership structure of financial institutions, and extend the scope of financial sector reforms to contractual savings institutions. These measure have been designed to increase the efficiency of the financial system and to promote internationalization of the Korean financial market. GOK has applied to become a member of the Organization of Economic Cooperation and Development by 1996.

EXECUTIVE SUMMARY

Introduction

1. This study on the Korea financial sector has been undertaken at the request of the Government of Korea (GOK) through the Ministry of Finance (MOF) with the close cooperation of the Bank of Korea (BOK). The need for a more robust financial system that could effectively meet the requirements of a growing and increasingly complex economy is well recognized by the Korean authorities, the major market participants, and academicians. The financial system in Korea during the last three decades has been used principally to support the country's industrial policy, but the authorities desire a fundamental reorientation of the system to make it more market oriented to better serve the requirements of a complex Korean economy, which is the tenth largest economy in the world.

2. The approach taken by the GOK so far has been one of a "step-by-step" reform reflecting the Government's cautiousness. Deregulation plans have been adjusted from time to time to counter undesirable macroeconomic developments, and these plans have generally lacked a specific timetable. As a result, the GOK's plans are perceived by domestic market participants and the international community (especially Korea's major trading partners) as being too halting and lacking credibility. Therefore, the GOK decided to issue a blueprint for the liberalization of the financial sector and for market opening by early 1993. In this context, the MOF made a formal request to the Bank in April 1992 to assist the GOK in the preparation of such a blueprint. To get the best advice and fullest domestic support, the GOK has also sought the advice of three key domestic institutions (the Korea Development Institute or KDI, the Korea Securities Research Institute or KSRI, and the Korea Institute of Finance or KIF) and the International Monetary Fund (IMF). A Bank mission visited Korea in September/October 1992 to conduct the study. The mission greatly benefitted from the contributions made by the three Korean research institutions, BOK, and the MOF.

3. This report focuses on the following topics on which the GOK has specifically sought advice: (i) the money market; (ii) monetary policy and deregulation of interest rates; (iii) directed credit (policy loans); (iv) capital account opening; (v) bank supervision and prudential regulations; and (vi) the bond market. Since the conduct of monetary policy and the role of the central bank are closely linked to most of the above topics, they are also covered. A brief discussion of the financial system and recent macroeconomic developments are presented at the beginning of the report to put the financial sector reforms in the context of the economy. Key points on each of the above mentioned subjects are summarized below. The proposed reforms, the rationale behind them, and their sequencing are also provided.

Macro Context of the Financial Sector

4. During most of Korea's development process, the financial sector has been viewed as an instrument for accelerating growth in the real

economy. This was true especially during the 1970s, which saw a return to low and often negative real interest rates. The function of the financial system was seen as one primarily to mobilize resources and to allocate those funds to sectors and activities whose growth was being promoted by the Government. In addition to interest rate controls, this strategy was implemented through government ownership and control of commercial banks and detailed credit allocation schemes. However, it did not contribute to the development of the financial sector commensurate with the vitality of Korea's real economy. By the early-1980s, the imbalance between the financial and the real sectors of the economy were obvious to Korean policy makers. In response, a gradual program of financial reforms was initiated and has continued throughout the past decade.

5. Between 1986 and 1988, GNP grew at an average annual rate of over 12 percent, due mainly to export growth, which averaged about 20 percent annually. This led to large current account surpluses during that period. In 1988, the current account surplus amounted to US$14.2 billion, or 8.2 percent of GNP. The rapid expansion of exports was brought about by the sharp decline in oil prices, the depreciation of the Won against both the yen and the dollar, and accelerated economic growth in the OECD economies (the main markets for Korean exports). The manufacturing sector grew more rapidly in each of these three years, outstripping the growth of the service sector. Much of the foreign exchange surplus accumulated during 1986-88 went towards reducing the stock of external debt, which fell by end-1988 to about US$31 billion (or about 18 percent of GNP).

6. Since then, economic growth has been less spectacular, with GNP growth of only 6.8 percent in 1989. The growth rose thereafter. However, the main source of growth in the period since 1989 has been from domestic rather than export demand. Since 1989 (and including the first half of 1992), the growth of private and public consumption has been faster than GNP growth. From 1989 to 1991, the contribution of net exports to GNP growth was negative. Exports (in Won terms) actually fell in 1989 and recovered only modestly in 1990 and 1991. Meanwhile, average import growth in 1989-91 was over 15 percent. These trends in the external sector appear to have been reversed in the first half of 1992, with exports growing at over 12 percent and imports rising by only 7.5 percent. Domestically, consumption growth remained strong in the first half of 1992. GNP growth in this period slowed to an annual rate of 6.9 percent (from 8.4 percent in 1991), mainly because investment grew at less than 3 percent, due to the imposition of controls on construction activity. GNP growth during the second half slowed further to an annual rate of 3 percent due to the sharp decline in investment.

7. As a result of these trade developments, the current account balance shrank sharply in 1989 and shifted into deficit in 1990. Although the deficit widened to about US$9 billion in 1991 (or about 3 percent of GNP), it narrowed in the first half of 1992, and for the entire year is expected to be about half its 1991 level. These changes in the current account balance had their counterparts in a widening savings-investment gap in 1990 and 1991. However, this reflected not falling domestic savings rates (para. 9), but buoyant investment. A sharp increase in consumption also kept import growth high. During this period, the construction sector replaced manufacturing as the fastest growing sector of the economy.

8. The differences in macroeconomic outcomes during this period, relative to 1986-88, were partly due to a less favorable external environment. The real effective exchange rate appreciated almost 25 percent between 1987 and 1989, and while it depreciated slightly in 1990, its appreciation again in 1991 brought it back to its 1989 level. However, the more significant changes occurred domestically. As political liberalization proceeded, wage demands and labor disputes escalated, leading to sharply higher unit labor costs in Korean manufacturing that hurt its competitiveness in export markets. Moreover, consumption expenditures (particularly on durables) and housing construction rose rapidly, compensating for their repression in earlier years.

9. In terms of savings behavior, the noteworthy change that occurred during the 1980s was the increase in the gross national savings rate which averaged 36 percent during 1988-91. Even more dramatic has been the behavior of household savings which almost tripled between 1980 and 1991, mainly propelled by sharp income growth. The other source of higher savings has been the increase in the corporate savings rate which rose from about 10 percent through the 1970s and 1980s to about 17 percent during 1988-1990. These remarkably high savings rates, combined with the constancy of government savings, mean that continued high real interest rates in Korea cannot be attributed to a lack of capital. An alternative, and more likely explanation, is that these rates reflect the inefficiency of the financial system in intermediating domestic savings.

The Financial System

10. Structure of the System. During the 1970s, the deepening of the financial sector in Korea was hampered by negative real interest rates. As a result of interest rate reforms and the fall in inflation, financial sector development accelerated in the early to mid-1980s. The ratio of broad money (M2) to GNP rose from 32 percent in 1979 to 41 percent by 1990. Broader measures of financial depth rose even more dramatically. The ratio of M3 to GNP has increased continuously from 1979 onwards, almost tripling by 1991. Domestic financial assets as a share of GNP have almost doubled over this period. The expansion of financial assets during the 1980s also reflects the growing role of securities markets and the introduction of new financial assets. However, despite the deepening of Korea's financial sector during the last decade, the controls that remain on financial sector activity left it behind other East Asian countries such as Malaysia and Thailand, and substantially behind selected OECD countries (USA, Japan, Germany) and Taiwan, China (Chapter II).

11. The more rapid growth in M3 compared to M2 reflects the expansion of non-bank financial intermediaries (NBFIs). The NBFIs (such as short-term finance companies, investment trust companies, insurance companies, and mutual savings companies) were encouraged by the GOK to mobilize funds from the curb markets (which had grown when real interest rates were negative during the 1970s) into the organized financial sector. The NBFIs were allowed to operate relatively freely both on the asset and liability sides. The curb financial market has to a large extent been effectively integrated into the organized sector. The bulk of its business, both on the deposit and lending side, has been taken over by

NBFIs. The main beneficiaries of this integration have been large savers who now enjoy significantly higher returns on funds invested in NBFIs than they did before on non-financial assets or in the banking system.

12. The tight control of the domestic banking system through rigid interest regulations (both on deposits and loans) and the de facto deregulation of the NBFIs have led to a rapid decline in the contribution of banks in the financial sector. Administrative control through window guidance has also hampered the development of the management of domestic banks and has placed them at a comparative disadvantage vis-a-vis foreign banks and NBFIs. This decline in the relative importance of the banking system has adversely affected the ability of the BOK to conduct monetary policy (Chapter IV). The NBFIs are not as constrained as the banks by monetary tightening (which uses M2 as the intermediate target). Consequently, corporate borrowers have turned to NBFIs during periods in which bank credit has been squeezed. Given that Korea is now the tenth largest in the world, it needs a banking sector which is efficient and capable of operating globally side by side with the Korean conglomerates. Therefore, a revitalization of the banking sector would be beneficial to the economy.

13. Another structural change in the financial system that occurred during the 1980s was the growth of the market segments that are not as tightly subject to interest rate controls--in particular, the markets for commercial paper and corporate bonds. The share of financial savings held in the form of securities of various kinds increased from about 21 percent (in gross terms) in 1979 to about 30 percent in 1991. Despite the steps taken towards deregulating interest rates on bank loans, deposit rates have remained low and tightly controlled. As a result, different borrowers are charged widely-varying interest rates on borrowed funds, even for investments that involve the same degree of risk. Such segmentation implies that many projects that deserve financing are rationed of credit while others with lower rates of return are financed.

Money Market

14. The money market is one of the most important components of the financial market place. It is the building block of a sound capital market. The importance of developing an efficient money market (both inter-bank transactions and the issue and trading of money market instruments) in the context of financial reform is due to the fact that it allows the central bank to influence market interest rates by easing or tightening the access of the money market to its resources. In other words, indirect monetary control procedures (when direct monetary controls or regulated interest rate policies are abandoned) function well if the money market is well developed and is significantly diversified with a broad range of money market instruments. The central bank can influence short-term interest rates in the inter-bank market or other segments of the money market by adjusting the supply of reserves to the system through the purchase or sale of government securities or similar instruments.

15. Korea has a reasonably well functioning money market, but its potential is not fully realized because of interest rate controls and

excessive administrative intervention. In Korea, the money market developed in the 1960s with the issuance of Monetary Stabilization Bonds (MSBs) in 1961 and Treasury Bills (TBs) in 1967. In addition to these instruments, it now embraces a wide range of financial instruments: Commercial Paper (CP), Negotiable Certificates of Deposit (CDs) in 1974, Repurchase Agreements (RPs), Bankers Acceptances (BAs) in 1989, and the Call Money Market (inter-bank market). The Government made a conscious effort to develop this market to bring the curb market into the organized financial system with the promulgation of the Short-term Financing Business Act, and the establishment of investment and finance companies and the call transaction center in the Korea Bankers' Association. The largest segments of the money market are call money, commercial paper and MSBs.

16. The money market in Korea has been growing in size and diversity in the last few years, paving the way for bolder action to liberalize interest rates. However, it has remained much less competitive, segmented and tightly controlled. Of all the individual segments of the money market, the inter-bank market has been the most competitive and has functioned with a minimum of restrictions, but its relative size is small. The MSBs are the largest in volume and can be useful in conducting open market operations, but their sale in the primary market has been managed and the interest rate on them has been lower than market rates (Chapter IV).

17. A well developed money market is essential for the monetary authorities to influence the level and structure of market interest rates. Until 1988, as observed in Chapter IV, the use of indirect monetary control procedures was minimal in Korea. This was because the BOK as well as the MOF were setting, through regulations and rules, maximum interest rates on each type of deposit and loan of banks, and controlling the volume of bank credit through moral suasion and/or other means. Even after the ceilings on interest rates were relaxed or removed in 1988, informal window guidance took their place to achieve the same results as the formal regulations as far as the levels of market interest rates were concerned.

18. The GOK should take concrete steps to further develop the money market. These should include: (i) full liberalization of interest rates and introduction of risk free market based instruments. This could be achieved either through issuance of the MSBs at market rates as they fall due for refinancing or through issuance of new treasury bills in sufficient volume and varied maturities to enable development of a vibrant secondary market. GOK should consider advancing the lifting of controls on MSBs from 1997 to 1994. The impact on the profitability of the BOK and the issue of policy loans need to be considered concurrently; (ii) delegation of the function of interest rate setting, pricing, and choice of instruments to the market participants; (iii) improvement in the clearing and settlement system for money market instruments; (iv) provision of on-line information on money market instruments to market participants and public; and (v) strengthening of the credit rating agencies and enabling them to rate the instruments based on credit risk of the issuers. These recommendations are elaborated in Chapter III.

Monetary Policy

19. Monetary policy in Korea has been ineffective since the automatic policy loans provided by the BOK on behalf of the GOK created reserve money and therefore rendered monetary policy ineffective. The interest rate subsidy on such loans also adversely affected monetary policy management. As a result, the ability of the BOK to conduct monetary policy is very much constrained. The monetary policy objectives in Korea had dual goals--price stability and economic growth. However, because of the possible conflict between them, a balance between the objectives has been maintained by occasionally switching the targets.

20. M2, one of the measures of broad money, has been the frequently used intermediate target, while the monetary base has been the operating target. These targets are reviewed continually to take into account unanticipated developments in the economy. The targets have been within the desired range more often than not, though of late, M2 as a monetary policy target has lost much of its significance due to the emergence of substitutes for M2 from the operations of NBFIs.

21. At present, the BOK has basically three indirect instruments of monetary policy--rediscount policy, RRs, and a somewhat limited open market type of operations. These have been operated in the past in combination with other direct instruments of control, such as ceilings on bank credit and interest rates and window guidance of one type or another. The rediscount policy has not been very effective, not least because the rediscounts directed towards liquidity management were a small part of total rediscounts, apart from the adoption of generally concessional rediscount rates charged on bank access to the BOK. Reserve Requirements, though potentially a powerful instrument, are less frequently used by the BOK, as they have tended to have an adverse impact on the portfolio of banks and the liquidity of the financial markets. It also has less flexibility relative to open market operations, which have been resorted to on a limited basis in recent years.

22. The effectiveness of open market operations in Korea is attenuated by the practice adopted by the authorities of offering interest rates on paper such as MSBs used in open market operations which were substantially lower than market interest rates. This has discouraged the holding of MSBs on a wide scale, and consequently the development of a secondary market for these bonds, essential for effective open market operations. Besides, there is a lack of volume and diversity of paper used in open market transactions as the Government's issuance of Treasury bills is limited and there are no other comparable instruments except the MSBs.

23. If monetary policy is to succeed in Korea in achieving its monetary targets of M2 or any variant of it, it should be able to influence the behavior of the money multiplier. This is because M2 depends more on the changes in the money multiplier than on changes in the monetary base. Of all the monetary instruments, open market operations possesses a greater power to change the opportunity cost of holding currency by targeting monetary base as well as interest rates as the intermediate target, and by shifting the emphasis between the two in

accordance with the needs of emerging situations, as amply demonstrated by the experience of both developed and developing countries which switched in recent years to indirect monetary policy instruments.

24. Korea would also do well to move more towards indirect monetary policy instruments. The reasons for this are the following: (i) banks and financial markets have learned to avoid direct monetary control procedures. An attempt to impose new controls would lead to new distortions; (ii) the use of direct controls imposes costs on banks in the form of a loss of competitiveness vis-a-vis NBFIs or foreign banks. As mentioned earlier, a robust banking system is essential for Korean trade and overseas operations; (iii) the complexity of financial markets makes it very difficult for the monetary authorities to exercise direct control effectively; (iv) with current account transactions being largely liberalized (para. 38), money supply variations have been more frequent, which do not lend themselves to direct monetary controls; and (v) with a move towards a flexible exchange rate regime, the monetary authorities can be in a better position to control money supply through resorting to indirect monetary control procedures.

25. For indirect monetary policy instruments to be used, it is a precondition that interest rates on banks assets and liabilities should be completely deregulated. Most of the concerns about interest rate deregulation expressed in official and semi-official quarters in Korea have less validity at the present stage of Korean development and in the context of the need to integrate Korean domestic financial markets with the global economy. From this point of view, the government policy of September 1991 to deregulate interest rates is a step in right direction. However, its implementation in the first stage has not been perceived by market participants as being real since formal regulations have been replaced by informal window guidance. The deregulation plan would acquire greater credibility and sustainability if the authorities could rearrange sequencing of deregulation measures with specific dates which are not conditional upon certain macroeconomic parameters.

Credit Allocation System

26. As discussed earlier, the Government has used the financial sector to support its industrial policy through the allocation of credit to selected sectors and enterprises in the form of policy loans at below market rates. At the end of 1991, total policy loans amounted to W 60 trillion, or 39.7 percent of total domestic credit and the assets of KDB and KEXIM. The share of policy credit climbed to 44.4 percent in 1987 and has gone down slowly. The ratio of policy loans to total loans of banks, which jumped to 60 percent at the end of the 1970s from a 40 percent level in the early 1970s, declined to the 50 percent level in the mid-1980s.

27. The main sources of funds for policy loans consist mainly of: Deposit Money Banks (DMBs), NBFIs, and the Government. In 1991, the DMBs accounted for 53.0 percent of total policy loans followed by the NBFIs (40.7 percent) and the Government (6.3 percent). Commercial banks (deposit money banks and local banks) are required to extend 35 percent of

the increment in their loans from banking funds to SMEs. This ratio is 25 percent in the case of foreign bank branches which do not make use of the BOK's rediscount window. The requirement for NBFIs is higher but the interest rates are not regulated as is the case for the commercial banks. Policy loans from government funds are mainly handled by the specialized banks (Korea Development Bank, Korea Housing Bank, Industrial Bank of Korea and the Korea Export-Import Bank).

28. The composition of policy loans of Deposit Money Banks as of the end of 1991 and their share in total loans was as follows: housing (W 9.7 trillion, 48 percent), for equipment of export industries (W 3.2 trillion, 16 percent), agriculture (W 2.3 trillion, 12 percent), foreign trade (W 2.2 trillion, 11 percent), special equipment loans (W 0.9 trillion, 4 percent), fishery (W 0.5 trillion, 3 percent), livestock (W 0.6 trillion, 3 percent), and rural private debt subsidization (W 0.4 trillion, 2 percent). Since 1987, export financing has been phased out to a large extent, but increased credit to the KDB and the KEXIM has more than compensated for the reduction. Policy loans to the agricultural and housing sectors and temporary subsidized credit for facility investment have also contributed to the expansion of policy loans.

29. The BOK supplies credits to banking institutions either by rediscounting commercial bills or by extending loans against the collateral of selected financial assets of banks. At the end of 1991, such loans from the BOK rediscount window amounted to about Won 13.5 trillion, compared with W 151.2 trillion provided by the financial system. Since most of rediscount loans are sector specific and involve automatic rediscounting, about 95 percent of such loans can be considered to be policy loans. The BOK can influence the use of such loans at a margin through variation of the proportion that is eligible for rediscounting.

30. There are five major drawbacks to the provision of directed credits in Korea. First, it is essentially a tax on the banking system and small depositors. Policy loans at below market rates reduce the profitability of domestic banks and retard the development of a robust financial market. Second, the existence of large policy loans at below market rates combined with controlled deposit rates adversely affects the efficiency of the banking system. Intervention in the banking industry (i.e., day-to-day operations and asset allocation decisions) does not provide incentives for the bank management to innovate in their operations. Nor do the banks have much incentive to select profitable borrowers since they are not rewarded for doing so. Rather, banks tend to passively accommodate the credit demands of the government-favored borrowers. Third, policy loans create moral hazard for bank supervision and shift the credit from the private sector to the Government as the Government becomes a de facto partner in the ventures. Fourth, the development of professional bankers is retarded. Although most banks are now private, the top management do not appear to have autonomy in managing the banks. Finally, large policy loans made available through the rediscount window of the BOK at below market rates constrain the ability of the BOK to conduct effective monetary policy.

31. The cost of policy loans in Korea has been fairly substantial. The interest rate subsidy extended to policy loan borrowers in 1991 amounted to about W 2.0 trillion, 1.0 percent of GNP and 6.2 percent of

government expenditure. The estimated amount of interest rate subsidies were calculated on the basis of comparing the corporate bond rate against the average on-lending rate of three widely utilized policy loans: the export promotion fund, the machinery industry promotion fund, and the NIF.

32. The relative emphasis of the Government's credit allocation policy applied to the banking system has had a major effect on who bears the cost and risk of intervention. The use of subsidized rates and preferential finance has transferred the financing burden from the government budget to the BOK and the banking system. The discount window of the BOK plays only a limited role because many of the BOK loans are automatic rediscounts of policy loans by the banking sector (Chapter IV). BOK generally absorbs reserves created by the policy loans through the sale of MSBs at below market rates to NBFIs. Although the interest rate on the MSBs is below market, the BOK still incurs a negative spread of 6 percent p.a.--the spread between the MSB rates and the discount rates. As a result, BOK incurred an operating deficit of W 1.27 trillion during the January to May 1992 period, against its reserves of W 1.34 trillion.

33. It is well recognized in Korea that the volume of policy loans is very large by any standards. In Japan, the size of total policy loans was only 3 percent of the total bank credit and the level of subsidy was much less. Therefore, there is a clear need for Korea to take concrete steps to reduce the size of policy loans over time if the present system of credit allocation is to be replaced by indirect monetary controls. Since the adoption of an indirect monetary control policy to replace the present system of directed credit is being contemplated by GOK, it is important that the operating deficit of the BOK which emanates from the policy loans be properly financed through the budget. For this reason, there is merit in frontally addressing this problem of policy loans. Some of the options for addressing the policy loans are discussed below.

34. While policy loans in the past have been targeted to support development of the productive sectors and consequently contributed to the growth of the economy through changing significantly the structure of the manufacturing sector, the direction of preferential finance has changed considerably in the 1980s. Policy loans are now targeted at sectors like agriculture, fishery, and livestock, while the credit risks continue to be left to the banking system. One option is that the Government should continue in the direction it has already taken in sharply reducing directed credit activities. More specifically, it is recommended that the Government should: (a) develop a concrete plan to phase out policy loans in a period of four to five years. As a first step it may wish to reduce the level of interest rate subsidy by linking the interest rate on policy loans to a benchmark interest rate such as a market determined MSB rate; and (b) address the issue of policy loans on BOK books. The mission analyzed several options for achieving this. The options include: (a) transfer of all policy loans from BOK's books to specialized financial institutions; (b) creation of a trust fund; and (c) establishment of a wholesale facility.

35. In some countries, policy loans were initially promoted by the central banks, but were later transferred to specialized financial institutions as the conduct of monetary policy became more complicated. It was also recognized that a strong central bank free from development

lending is essential for the financial system. The specialized institutions are better equipped to handle such policy loans and the cost associated with such operations can then be financed transparently through the budget rather than through taxing the financial system. In Korea, there are several capable specialized institutions which can take over these policy loans from the BOK. All the export loans could probably be transferred to the Korea Export-Import Bank. The Industrial Bank of Korea (IBK) could take over the small and medium industries loans, and the Agriculture Cooperatives could assume the agriculture loans. These institutions could operate rediscounting facilities for these loans. Should the Government wish to pursue this course of action, it may adopt a mechanism for transferring policy loans to specialized banks as discussed in Chapter V.

36. The estimated costs to the Government of transferring all the policy loans off BOK books to the specialized financial institutions would be about W 1.5 trillion in the first year and W 190 billion in the second year (para. 5.29). The subsidy element involved in these loans could be linked later to a benchmark rate as reflected in the market related rate on MSBs or Treasury Bills, which may be issued once the interest rates are deregulated. Over time, it can be eliminated by equating the rate on policy loans to the rate on MSBs or Treasury Bills. This measure would remove at one go the rate distorting element from the financial system on the eve of financial deregulation, thereby facilitating the emergence of market related rates on all financial assets. An added advantage of the proposed approval is that it would provide BOK with government securities in exchange for the policy loans which can then be used to conduct open market operations. However, it is appreciated that transferring all the policy loans at one go may not be feasible. Therefore, the Government should as a priority consider transferring at least the BOK policy loans which are of a developmental nature. It is estimated that at least about half of BOK policy loans are of this nature. The cost of carrying such loans by the specialized institutions is to be financed from the budget. Interest rate subsidies on any remaining policy loans with BOK are to be progressively removed and the volume reduced.

Opening of the Capital Account

37. Korea initiated a financial liberalization program beginning in 1981, but it was not the type of liberalization strategy familiar in economic literature or in the Southern Cone countries where it reached its apogee in the late 1970s and early 1980s. Two features distinguished financial deregulation in Korea from the strategy pursued in other countries. First, Korea has achieved positive real interest rates in the financial market. Second, Korea has maintained (even during the controlled phase of financial liberalization) strict restrictions on the capital account on the grounds that a free capital account would induce capital flight and spawn more serious macroeconomic and financial system instability. Since then, Korea has moved a long way towards the liberalization of the capital account through a series of small steps, though the capital control mechanism remains in place. It has also been able to have significant overseas investment.

38. Since 1984, inflows of portfolio investment have been liberalized progressively. Initially, limited investment was allowed in Korean stocks by foreigners through investment funds, foreign securities companies were allowed to open representative offices, and Korean companies were permitted to raise foreign capital through equity-linked bonds. In 1992, foreigners were allowed to invest directly in Korean stocks, subject to limits. In addition, free capital repatriation is now allowed. However, foreign borrowing by Korean companies is still restricted. A plan for continued capital market liberalization has been announced, and the short-term actions in this plan will focus on the national treatment of foreign financial institutions and a widening of the range for daily fluctuations of the Won so as to expand the role of market forces in exchange rate determination. The current account of the balance of payments is considerably free to a point that Korea has formally accepted the obligations of Article VIII of the IMF Agreement, effective November 1988.

39. Policy Implication of Liberalization of Capital Account. There is an inherent bias against freeing the capital account in countries which had repressed economies in the past, as Korea once had. This is because the government in such an economy finances fiscal deficits by taxing its financial system by instruments such as reserve requirements. Since taxation depresses yields on bank deposits, the depositors tend to substitute foreign financial assets with higher yields for domestic currency denominated assets. Even the borrowers, who have to pay higher rates on loans, try to avoid the tax by seeking cheaper loans abroad, and to the extent this happens, the domestic financial system shrivels with the consequent fall in tax revenue. Hence, such economies have imposed severe restrictions on the movement of short-term capital. Korea has clearly outgrown that stage, but the Korean authorities are haunted by their experience of capital account liberalization in the mid-1960s, which led to a large amount of short-term capital inflows. However, the repayment of short-term overseas credit coincided with the appreciation of the exchange rate induced by capital inflow, which adversely affected export earnings. This episode may have been a consideration behind the decision of the Korean authorities to include capital account liberalization in the blueprint for financial reform at a later stage.

40. An argument often voiced in Korean official circles, and generally taken as valid, is that the removal of capital controls in the early phases of financial reforms will lead to the appreciation of the exchange rate, thus impeding exports and raising domestic liquidity. This would then accentuate inflationary pressures, but without much impact on high domestic interest rates in view of the prevailing inelastic demand for bank credit. However, in the present context, it is unclear that these would be the likely consequences. Korea currently has an inflation rate of about 7 percent, with a GNP growth rate of around 7 percent. The fiscal deficit is modest at 1.4 percent of GNP, the external deficit is around 2 percent of GNP, and exports are growing at a rate of 8-9 percent (though this is lower than during 1987-89). The unemployment rate is less than 2 percent, and inflationary pressures during the last few years have emanated mainly from higher wage demands.

41. If the capital account were completely freed in such circumstances, it would in all likelihood have a beneficial impact on

Korean growth. With an increased inflow of capital, it is true that the exchange rate which has been depreciating in the last two years under the new market-oriented exchange rate system would initially appreciate. At a time when exports are expected to rise from their present low level, the initial impact would admittedly be adverse. However, it need not be so, as the appreciated exchange rate would lead to a fall in the level of inflationary pressures insofar as the cost of imports on which Korean investment and consumption is significantly dependent will decline too. To the extent inflation is moderated, inflationary expectations would be dampened, leading to a decline in nominal and real interest rates in the domestic financial markets. Thus, what may be lost by exporters through appreciation of the exchange rates, could be compensated by lower interest rates. Even the money supply effects of increased capital need not be negative. With the capital inflow, the money supply will initially rise. However, the impact of this could be sterilized through open market operations by the central bank. Furthermore, the second round effects would be healthy with the restoration of the money supply to its initial level once the exchange rate has appreciated.

42. But the most significant impact of the increased capital inflow would be reflected in the rate of growth of output. Considering that the unemployment rate has reached the minimum possible level (i.e., 2 percent), output growth can be maintained if labor productivity is raised, which is possible only with a switch from labor intensive techniques of production to more capital intensive techniques. Korea can achieve this switch with the import of cheaper capital goods embodying new technologies. With new output and its pattern, it would be a short leap to increased exports in new lines. In this scenario, the external deficit may persist for some time. But this need not be a cause of serious concern so long as that deficit remains sustainable enough to be financed by normal capital inflows. The Korean economy has reached a stage in which capital inflows to finance new long-term investment need to be encouraged so long as the interest paid on them is equal to or less than the rate of return earned on their use in domestic investment. If the authorities feel the need to reverse the flows in one way or the other, they will be able to do so with the new instruments of macroeconomic policy at their disposal, such as the flexible use of exchange and interest rates made possible by the liberalization of the financial sector and the capital account.

43. Despite recent reforms, the Korean financial sector remains heavily controlled both in terms of pricing and allocating credit. Given the pervasiveness and history of these controls, domestic financial institutions, especially commercial banks, do not appear to be well prepared either financially or managerially to compete successfully with foreign banks in Korea or abroad. As mentioned earlier, the control exercised by the authorities has not fostered development of professional bankers of the standards which can compete effectively globally. However, this does not imply that the talent does not exist. A rapid opening of the capital account without sufficient asset/liability management skill in the banking system can run the risk of causing failures within the financial system. For this reason, measures to improve the stability and efficiency of the domestic financial sector should take priority at this time. It is therefore recommended that capital account liberalization takes place after the deregulation of the domestic financial system to

avoid volatility in interest rates and any potentially disruptive impacts on the domestic banking sector. However, this should not preclude the authorities from allowing limited liberalization (such as allowing foreign portfolio investment in government securities and MSBs) after the deregulation of interest rates have taken place. Such a measure will further enhanced the development of the bond market (Chapter VIII).

Supervision and Prudential Regulations

44. Korea already has a relatively strong supervisory structure in place, with strong leadership from the MOF. Government supervision over the financial system in Korea has been historically strong for economic regulation purposes. However, with the advancement of the Korean economy into the ranks of the OECD countries and the increasing market-orientation of both the real and the financial sectors, the level of government intervention will need to decline. Such a withdrawal by the Government from direct credit allocation is essential to allow the financial sector to exercise better credit discipline on enterprises and to play a more efficient role in resource allocation according to market forces. However, withdrawing from economic regulation does not mean that the Government should reduce prudential supervision. Indeed, the move towards greater market orientation would require the Government to be more transparent in: (i) creating a level playing field for all financial institutions; (ii) setting clear capital adequacy and other financial rations to allow financial institutions to improve their risk management; and (iii) generating timely and reliable system-wide information on the performance of the financial sector and financial institutions.

45. It is suggested that the GOK consider making the improvements in the supervision and regulatory structure outlined below:

(i) Consolidate supervision over the entire financial system under a single independent body which is directly responsible for systematic monitoring and solvency of the financial system. The present system of supervision with OBS being responsible for roughly one half of the system, and the MOF for the other half, with some delegation of examination functions to the OBS, implies that no single agency will have at all times a global or systemic view of risk trends in the financial system. In several OECD countries, the monetary policy function and the supervisory function have been vested in the central bank, since the central bank must be in a position to know when it is providing lending of last resort, if it is also providing "capital of last resort". In some countries such as France and Japan, the bank supervisory function has been vested with a Bank Commission within the Ministry of Finance. Some countries vest supervision with a body independent of the Ministry of Fiance and the other government ministries, such as in Canada, Chile, Hungary and Germany. The concern is to separate prudential regulation from economic regulation. This trend is also seen in the securities industry, where the Securities and Exchange Commission is an autonomous body from the Ministry of Finance.

(ii) Accounting standards in Korea should move closer to OECD standards as soon as possible. Specifically, loan classification and loan provisioning standards, as well as marking securities values to market should be amended fairly quickly, to make the performance and solvency of domestic financial institutions more transparent and comparable with international standards.

(iii) Increased transparency. Current limitations on lending for real state and consumer durables should be relaxed to make the actual flow of funds more transparent and discourage disintermediation. The needs of these sectors are financed indirectly through the banking system, but the authorities are not able to monitor more accurately the ultimate utilization of funds through the banking system, and therefore prevent on a timely basis excessive risk concentrations in any particular sector (e.g., real estate). In the absence of strong and independent outside supervision, the Government at times reverts to direct intervention (such as the 1991 rule on Chebols' picking three major business activities) to control credit access by the private sector and encourage "productive" as compared to "speculative" borrowing.

(iv) Mismatch in maturity. The Korean financial system still relies heavily on using short-term deposits to finance long-term investment. This fundamental maturity mismatch occurs partly because of the late development of the securities and long-term bond market, and partly because of the lack of strong and deep contractual savings institutions, such as private pension funds and strong life insurance companies. Recent liberalization efforts to increase competition through the entry of foreign life insurance companies have helped partly, but from a strategic point view, system-wide stability and soundness can only be strengthened through narrowing the maturity mismatch and the strengthening of the capital base of the financial sector, as well as the enterprise sector. Interest rate deregulation will encourage the corporate sector to reduce its leverage as the cost of debt financing will reflect the true cost of capital.

Bond Market

46. Korean securities markets have grown significantly through the 1980s. The excellent macroeconomic performance and phenomenal growth in new equity securities, especially during the second half of 1980s, made the Korea Stock Exchange (KSE) one of the largest emerging bourses. Although market activities have become sluggish over the last two years, the Korean stock market now ranks thirteenth in the world in terms of market capitalization.

47. In the process of domestic market growth, Korean authorities have gradually taken measures to open the stock market for foreign investment. Since investment trust funds for non-residents were first established in 1981, Korean trust companies have set up a number of

international investment trusts. The introduction in 1984 of the Korea Fund, a pioneer country fund, brought a series of country funds for international investment in Korean equities on the KSE. Finally, the stock market opening for direct purchase by foreign investors became effective in January 1992, attracting nearly US$800 million for the first three months in 1992.

48. The impact of the market opening on Korea's domestic economy has been relatively inconsequential, erasing some of the concerns about internationalization. Although observations are too limited to warrant definitive judgement, foreign investment flows have not destabilized the domestic market. The market opening was an important milestone, but many restrictions remain. There appears substantial room for improvement in the foreign ownership limit, regulatory arrangements (including a capital gains tax), and administration and procedures.

49. The Korean bond market has also grown rapidly in recent years, but the growth is confined to the primary market for relatively few issues. New bond issues are dominated by MSBs and guaranteed corporate bonds. The secondary bond market remains largely underdeveloped due to interest rate controls and the controls of capital issues by the Government. There is no benchmark for interest rates in Korea, and the bulk of government securities and MSBs are allocated by the MOF and BOK mainly to financial institutions.

50. The first priority of the Government should be to develop the domestic bond market. This will require both policy and institutional changes. At the policy level the Government will need to: (i) deregulate interest rates on government securities starting with the auctioning of the MSBs or a Japanese model of a mix of price competitive auction and fixed underwriting syndicate. In this connection, the related issues of the profitability of the BOK and the policy loans will need to be addressed (Chapters IV and V); (ii) deregulate the interest rates on corporate bonds and allow the market to determine the interest rate for each issue based on the credit risk and rating assigned by the credit rating agencies. In this connection, the credit rating agencies should be developed further. Guarantees of the securities should be voluntary and the guarantee fee should be market based; (iii) controls on capital issue should be lifted and replaced by disclosure requirements. The decision on when to issue securities and at what price should be left completely to the issuers and the market participants; (iv) a network of primary dealers should be activated for making markets in government securities; (v) the clearing and settlement system for corporate bonds should be improved; and (vi) information on the bond market for investors should be enhanced.

The Government Plan for Interest Rate Deregulation

51. It is realized by the authorities that local banks have been greatly handicapped in conducting their operations competitively, while foreign banks are not subject to interest rate ceilings, and NBFIs have been given greater freedom in regard to interest rate determination. Further, it was felt that a global financial environment has evolved in a manner that the Korean financial system has to strengthen its links with

it for enhancing efficiency of credit allocation and saving mobilization. The Government, therefore, announced a plan in 1991 for gradually deregulating interest rates and increasing competitiveness of the banks. The plan began to be operative in November 1991, and was expected to be fully implemented by 1997 (See Table 9.1 in Chapter IX). Subsequent discussions with the authorities indicated that the process of interest rate deregulation might be extended beyond 1997 by a couple of years, depending upon several unexpected developments.

52. Though the deregulation policy was formally launched in the second half of 1991, its implementation has been more notional than real. Formal regulation of rates on bank overdraft loans and commercial bills, corporate bonds with maturities over two years, and long-term deposit rates have been removed. But in effect, the actual rates charged on all these assets and liabilities continued to be subject to window guidance. Thus, there was no de facto deregulation of interest rates due to the reasons referred to earlier in this chapter. The government plan for financial sector reform has several positive features which may carry the Korean financial system to greater efficiency and growth. However, the implementation of the plan is contingent upon certain macroeconomic conditions and therefore the plan is generally perceived by domestic market participants and international community especially its major trading partners as being too halting and lacking credibility. In order for the plan to be credible it needs to have a specific timetable and be made known to all market participants so that they could operate freely in a deregulated environment.

The Case for Financial Sector Reform

53. The Korean economy has seen substantial liberalization in the real economy, while the path it has taken in freeing controls on the financial sector has been cautious and measured. The reforms that have been undertaken during the past decade have improved the efficiency of the financial system in many respects. Despite this progress, however, many distortions remain and these have influenced the structure of the financial system, its ability and efficiency in mobilizing and intermediating savings, and the efficacy of monetary policy. There is a need for further reform of the financial system for the following reasons. First, the Korean economy is now the tenth largest in the world, and approaching a developed country status. As a result, the Korean financial market is a part of a global market system and the major trading partners would naturally demand reciprocity in accessing Korean markets. Second, the direct control of the system which has served so well in the past has now become too cumbersome and is not the efficient to meet the financing of the a more sophisticated and internationalized economy. Continuation of the control is likely to lead to misallocation of resources and increase distortion in the system. Third, the macroeconomic condition in Korea is stable and ideal for implementing accelerated reforms (Chapter II). Fourth, as the financial system becomes large and complex, there is no other option but to move away from direct monetary control to indirect monetary control procedures. This would mean that interest rate deregulation, especially on the government securities and MSBs, must take place sooner rather than later. Fifth, Korea needs a more competitive and

innovative banking sector which can service the financing needs of the economy at home and abroad. Therefore, it is essential that full deregulation of the domestic financial system take place sooner rather than later.

Preconditions for Financial Sector Reform

54. The experience of financial liberalization in other countries points to three key preconditions if the programs of financial sector reform are to succeed. First, it is essential that there be macroeconomic stability. Second, significant liberalization of the real economy should either be completed or carried out simultaneously with the reform of the domestic financial sector. Third, it is essential that a strong framework for prudential regulation and bank supervision be in place when financial reform occurs.

55. In each of these three areas, the conditions in Korea today are favorable to accelerating the pace of financial reform. The macroeconomy is stable. Although the current account shows a deficit, it has fallen sharply this year, and the deficit is sustainable since adequate flows of foreign financing are easily available. The consolidated public sector account is roughly in balance. And finally, the inflation rate is falling after having risen to almost double-digit levels in 1991. Substantial liberalization has already occurred in the real sector. Industrial policy is now less interventionist and sector-specific. It relies instead on the functional support of industries dictated by market failure. Similarly, the trade regime is now less protectionist. Tariffs have been lowered and made more uniform and the coverage of quantitative restrictions reduced. Likewise, a relatively well-developed system of prudential supervision is already in place in Korea since the Government has historically exercised strong control over the financial system. The details of this framework are described in Chapter VII of this report.

Perceived Risks of Accelerated Financial Reform

56. Korea has thus far made very good progress in reforming its financial sector. However, the Korean authorities are reluctant to accelerate the reforms for the following concerns: (a) macroeconomic stability; (b) health of the banking system; (c) limited asset/liability management skills in the banks; (d) over indebtedness of Korean companies; (e) excess demand for credit; and (f) crowding out by the Chebols. These are discussed below.

57. Macroeconomic Stability. The Korean authorities fear that the deregulation of interest rates and rapid financial sector reform would adversely affect macroeconomic stability. However, the macroeconomic conditions in Korea today are highly favorable to accelerating the pace of financial reform. Although the current account shows a deficit, it has fallen sharply this year, and the deficit is sustainable since adequate flows of foreign financing are easily available. Indeed, it is arguable that Korea should be a net capital importer, when its future growth would depend on greater capital intensity of production. Substantial

liberalization has occurred in the real sector. Industrial policy is now less interventionist and sector-specific. Similarly, the trade regime is now less protectionist. Tariffs have been substantially lowered and the coverage of quantitative restrictions reduced. Korea is free from severe macroeconomic imbalances which threatened the financial liberalization in Southern Cone countries and some Asian countries like Indonesia and the Philippines.

58. Health of the Banking System. The domestic banks are reportedly saddled with a high proportion of non-performing loans which are by and large policy loans (Chapter V). Helped by the buoyancy of the stock market and favorable economic conditions during 1987-89, the banks in Korea have been enhancing their capital base and reducing non-performing assets (Chapter VII). Furthermore, the interest rate spread of 4.53 percent is much wider than in industrial countries like Japan and the United States.1/ Both of these factors should be expected to provide more than an adequate cushion against the risks of non-performing loans. If, however, such loans are considered to be a formidable barrier to interest rate deregulation, the authorities should move more expeditiously to remove policy loans from the balance sheet of the banks.

59. Asset/Liability Management Skills. It is believed that deregulation of interest rates on the liabilities of commercial banks without being able to adjust returns on their assets would disadvantage them vis-a-vis the foreign banks and NBFIs. However, the evidence seems to suggest that it is not such a major problem as is generally believed. However, this concern can be accommodated in the interest rate deregulation plan by allowing ceilings on interest rates on short-term deposits at the beginning, and their gradual removal later within a specified time.

60. Over Indebtedness of Korean Companies. Korean companies are highly leveraged. The debt-equity ratio for all manufacturing firms in 1991 was 3.09:1, and even the lowest in recent years--in 1989--was 2.54:1. This compares with 2.27:1 in Japan and 0.83:1 in Taiwan, China. However, Korean firms have been replacing bank loans with securities. In 1991, the ratio of securities in total financing rose to 55 percent compared with 27 percent in 1987. Interest rate liberalization will further increase the incentive for equity financing and therefore reduce the leverage level of Korean firms. Furthermore, there is a misconception that business firms pay the regulated interest rates on their borrowings. Banks generally evade the regulations by asking borrowing firms to maintain compensatory balances, utilizing other facilities to raise the effective cost of the borrowed funds compared to market rates. When bank credit is available at much below market interest rates and access to capital market for raising equity is rationed, the corporate sector has little incentive to reduce its leveraging. Therefore, the solution is to deregulate interest rates and allow firms unrestricted access to the capital markets with appropriate disclosures to protect the investing public.

1/ Sung-Hee Jwa, "Korea's Interest Rate and Capital Controls Deregulation: Implications for Monetary Policy and Financial Structure," July 1992, Korea Development Institute.

61. Excess Demand for Credit. It is argued that demand for credit in Korea is interest inelastic, particularly the credit demand for real estate. It is argued that under such conditions, if interest rate determination is left to market forces, rates would skyrocket and thus impede investment in the manufacturing sector and the growth of the economy. The interest inelasticity of credit demand appears largely based on the observation that at controlled rates there is competition for funds. The existence of excess demand at these rates is by itself not surprising. The intensity of competition for credit reflects in large measure the extent to which policy loans to preferred sectors siphon off credit. As a consequence, less credit is available for other sectors. Moreover, during the economic boom of the late 1980s, the strong demand for credit was fed by spiralling prices in the real estate and stock markets. Given that the economy has now returned to slower growth, and in particular the real estate and stock market booms have abated, credit demand appears to have weakened considerably. For instance, the current yield on three-year corporate bonds (October 1992) is 13.75 percent--the lowest in almost four years and down from almost 20 percent a year ago, and 15.5 percent as recently as September 1992. Therefore, the economic environment appears to be ideal to move decisively on deregulation.

62. Crowding-out by the Chebols. The concern here is that the priority sector borrowers such as small and medium industries and agriculture will be deprived of credit from the banking sector, and the banks would prefer to lend to the Chebols. This concern, however, can be addressed through the prudential regulations and bank supervision. An exposure limit by company, group and sector should be established and tightly monitored. Specialized banks could continue to meet the financing needs of the priority sectors.

Benefits of Faster Financial Reform

63. If the GOK can implement a credible financial sector reform, the following main benefits would accrue from further reform. The first would be the potential improvements in the efficiency of the financial system in intermediating savings. There are several indicators that point t inefficiencies in many segments of Korea's financial system, which raise the costs of financial intermediation. One set of measures has to do with the operational efficiency of Korean banks compared to their counterparts in Japan and the U.S. In 1990, labor productivity in Korean commercial banks, whether measured in terms of assets, loans or deposits per employee, was less than a tenth of the levels in Japanese banks. Moreover, limited competition within the Korean banking sector has meant that interest rate margins (the difference between loan and deposit rates) were about twice their levels in the U.S. and more than three times as large as in Japan. So it is not surprising that a recurrent complaint about the Korean financial system is that borrowing costs are too high.

64. Another measure of inefficiency in intermediation is the continued segmentation of financial markets. As noted earlier, there is reason to believe that the variation of risk-adjusted interest rates across different groups of borrowers has narrowed since the 1970s. But the Government continues to play a substantial role in allocating credit

through requirements that banks and NBFIs allocate a prescribed share of new credit to preferred sectors and BOK's automatic rediscount mechanism for loans to some sectors (Chapter VI). This means that financial markets still remain segmented to a significant degree, with the pricing of loans reflecting regulatory requirements rather than lenders' evaluations of the riskiness of different lending opportunities.

65. Actions to deregulate the financial system in several areas would encourage greater efficiency. Interest rate deregulation would encourage commercial banks to develop their expertise in asset and liability management. Even partial decontrol of deposit rates would allow them to compete more effectively with NBFIs in mobilizing funds. If combined with a relaxation of the sectoral lending requirements that apply to banks, it would reduce significantly the regulatory disadvantage that banks currently face relative to NBFIs. By allowing them to tailor their interest rates and products to market conditions and risk characteristics, it would promote efficiency in their operations rather than forcing them to operate in effect as cost-plus providers of financial services. Reducing the volume of policy loans would also restrict the flow of preferential loans and thereby reduce segmentation.

66. The favorable impact of these changes on the efficiency of the banking system suggests that the rise in lending rates that follows interest rate decontrol may not be as large as is feared. Although difficult to demonstrate, it is probable that the large share of policy loans in total credit has meant higher interest rates than in a liberalized system for those without access to these loans. Those borrowers will now see a reduction in their borrowing costs.

67. As Korea shifts from a surplus to a shortage of labor, among the most important issues is whether to continue to restructure the industrial sector so as to build comparative advantage based on technology rather than cheap labor. Such a shift is already underway, with the share of light industry in manufacturing output having shrunk by about 5 percentage points in 1989-91 compared to 1985-87. But this transition has not been easy, in part because capital remains expensive to most Korean firms--even while labor costs are rising. If financial reforms succeed in raising the efficiency of domestic intermediation and in broadening the access of Korean firms to external capital, industrial restructuring could occur much more smoothly, which could raise Korea's growth rate.

Proposed Financial Sector Reforms and Sequencing

68. In light of the above analysis, it is suggested that the GOK consider modifying its deregulation plan in regard to its scope, sequencing, and speed. The suggested changes are indicated in Table 1.

Table 1: Changes in the Scope, Sequencing, and Speed of the Deregulation Plan as Suggested in the Report

Phase	Loans	Deposits	Bonds	BOK	External Capital Account	Bank Supervision
Phase 1 1993	(i) Rates on all loans of banks and non-banks, excluding policy loans, should be freed. (ii) No window guidance.	Establish a single interest rate ceiling on deposits (except for demand deposits) of all deposit money banks in line with changes in market rates of interest.	(i) Rates on corporate bonds of all maturities and MSBs and T-bills when issued should be completely freed. (ii) Auction or market based method should be adopted for MSBs. (iii) Capital issue control to be liberalized. (iv) Bank guarantees of corporate bonds should be priced on credit risks. (v) Credit rating agencies to be strengthened to rate corporate paper issued on credit risk of individual issues.	Indirect monetary policy control through open market operations should be initiated on a modest scale. Credit controls through normal rediscounts (non-policy loans) and reserve requirements should be continued.	–	Begin the process of strengthening and unifying bank supervision function.
Phase 2 1994	Progressively reduce interest rate subsidy on policy loans by linking it to a market based benchmark rate.	–	–	Transfer policy loans off BOK books. Interest rate subsidies on any remaining policy loans to be progressively removed and volume reduced.	Purchase of bonds including government securities (MSBs and T-bills) by foreign investors should be permitted after interest rate deregulation has taken place.	Take necessary steps to strengthen bank capital, and accelerate adoption of OECD loan classification standards, and compliance with BIS capital adequacy regulations.
Phase 3 1994-5	Continue reduction of interest rate subsidy on policy loans.	Ceiling on deposit rates should be raised (but not removed) to conform to other market interest rates.	–	Pursue vigorously the use of government bonds, MSBs, T-bills or other suitable paper for open market operations.	–	–
Phase 4 1996-7	Interest rates on all policy loans to be market determined.	Ceilings on all deposit (including demand deposit) rates to be eliminated in 1996.	–	No preferential discounting of policy loans.	Capital account to be open. Flexible exchange rate policy to reflect market conditions to be initiated.	–

69. The main thrust of the proposed reform is that the deregulation of the domestic financial markets and current account should take place before the opening of the capital account. Such sequencing has worked very well in many countries such as Malaysia and Indonesia.2/

70. The rationale for the suggested changes in the scope, sequencing, and speed of the deregulation plan and its implementation are elaborated as follows. First, it is recommended that the period of reform be compressed for two reasons: (i) the momentum of deregulation will be lost if the period of change is too long; and (ii) the globalization of financial markets worldwide and the size of Korean economy create a need for a more rapid adjustment. Second, deregulation of lending rates on loans of all financial intermediaries is proposed to take place in a short period of time, instead of the step-by-step approach adopted by the Government. The current effective lending rates are already higher than the regulated ones as discussed earlier in the chapter. Therefore, even if the loan interest rates increase as a result of deregulation, the overall cost to the economy and the corporate sector would not change materially. Recent experience in Thailand and the Philippines shows that the level of interest rates actually declined. Third, deregulation of interest rates on deposits (except for demand deposits) of deposit money banks is proposed to be carried out in steps on the grounds that removal of interest rates on all deposits in one go may lead to excessive competition among banks to increase their market share. Since the banks are generally not very well-versed with modern asset/liability management techniques and the level of non-performing assets of the banking system could be higher than the published figures, a sharp increase in their funding cost without the ability to adjust the returns on the existing loan portfolio of policy loans creates a potential risk of bank failures. Therefore, a gradual deregulation of deposit rates with a clear timetable for eliminating the ceiling will provide enough time for banks to prepare themselves to cope with the new environment. It is also recommended that the Government completely withdraw from direct or indirect management of financial institutions to enable the development of professional bankers. Prudential regulations and bank supervision are to be strengthened and are to replace direct controls.

71. Deregulation of interest rates on government securities and MSBs should be advanced to 1993. Issuance of MSBs or T-bills at market rates will create a benchmark for interest rates that can be used to price other financial instruments. Auctioning these securities will be an efficient way to achieve this. This will foster further development of money and capital markets and facilitate the transition from direct momentary control to indirect monetary control procedures. The BOK would then be in a position to conduct open market operations.

72. It is recommended that foreign investors should be allowed to invest in MSBs and T-bills once the interest rates on these instruments are deregulated. Foreign investors are generally interested in investing

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2/ See "The Impact of Financial Reform in Malaysia," Messrs. Yusof, Hussin, Alowi, Sing, and Singh, Bank Negara, March 1992; "Indonesia: Financial Sector Report," Report No. 8159-IND, IBRD, May 10, 1990.

mostly in risk free and liquid financial instruments (i.e., government securities) in emerging markets. Foreign participation in the government securities market would impart breadth and depth to the bond market and encourage increasing domestic participation. This should also facilitate issuance of corporate bonds for foreign investors at a later stage. It is appreciated that the GOK has recently further liberalized foreign portfolio investment in the equity market and the specific timing of the opening of the bond market may be influenced by the magnitude of capital inflows from the opening of the stock market. The full liberalization of the capital account is left for the final phase when the banking system is fully competitive and efficient as a result of accelerated deregulation of the domestic financial system.

Concluding Remarks

73. Korea has achieved an economic miracle in a very short period of time, and it is now the tenth largest economy in the world. In the past, the GOK has used the financial sector as an instrument of industrial policy, and the main vehicles have been policy loans for the priority sectors and interest rate controls. However, the financial system, especially the domestic banking system, has substantially lagged behind the real sector in Korea and the financial systems in other ASEAN and OECD countries. There is a need to make the system more efficient and more market oriented. An accelerated financial deregulation is very timely and should be beneficial to Korea. The main thrust of suggested reform focuses on the deregulation of the domestic financial market and its institutions, with the objective of improving their efficiency so that they can effectively compete both at home and abroad. All the required ingredients for a successful reform appear to be in place, and what is needed is a st[illegible]g commitment to reform and the will to carry out the reforms decisively. The risks involved in such reforms are relatively modest and manageable given the prevailing macroeconomic conditions in Korea and the very high level of administrative skill in the Government.

I. INTRODUCTION

Background

1.1 In December 1991, a Bank mission visited Korea to prepare the proposed Financial Sector Investment Loan (FSIL). Given that the proposed FSIL is designed as a financial intermediary loan, the need for a financial sector study was recognized at that time. Subsequently, in April 1992, the Ministry of Finance (MOF) made a formal request to the Bank to assist the Government in the preparation of a blueprint for the liberalization of the financial sector and for market opening. The blueprint is to be completed by December 1992 and will be the basis for carrying out further policy changes to liberalize the financial sector. A Bank mission visited Korea in mid-April 1992 to discuss the terms of reference of the study and the modality of carrying out the study. To get the best advice and fullest domestic support, the Government of Korea (GOK) has also sought the advice of three key domestic institutions (the Korea Development Institute or KDI, the Korea Securities Research Institute or KSRI, and the Korea Institute of Finance or KIF) and the International Monetary Fund (IMF). Because of the sensitivity of the GOK, it was agreed by the department management that the report will be processed only up to the Green Cover stage. To ensure high standards of the product, it was decided by the department management to process the study as a regular sector study.

Macro Context of the Study

1.2 Overall, the economic performance of Korea has been impressive by any standards. During the Sixth Five Year Plan (1987-1991), GNP grew at an average rate of 10 percent p.a. However, the Korean economy has undergone rapid and significant changes since 1986. During 1986-88, Korea experienced a major economic boom, benefitting from low oil prices, low interest rates, and the low value of the Won against the Yen. GDP grew at 12 percent per year, the current account recorded surpluses for the first time in modern Korean history, and a large part of the external debt was repaid. Between 1989 and 1991, however, the trend has changed in some important respects. The growth of GDP continued relatively unabated, but the sources of growth were generated by domestic demand. Export growth became sluggish, as a result of an erosion of competitiveness due to huge increases in labor cost. Furthermore, the appreciation of the Won, combined with a rapid increase in private consumption, led to a surge in imports, and consequently the current account shifted into deficit. A deficit of US$10 billion was recorded in 1991, and a deficit of US$4 billion is expected for 1992. A rapid increase in private consumption and a construction boom were responsible for economic growth during 1989-91.

1.3 These recent developments have coincided with difficulties which have emerged as the economy makes the transition to maturity. With the weakening of the previous authoritarian rule since the Declaration of Democratization in June 1987, labor problems have increased. Wages have risen much faster than the increase in labor productivity, in combination with a sharp increase in labor disputes and work stoppages. The

performance of Korean industry, the engine of growth, has been adversely affected by the higher cost of both capital and labor in comparison with its competitors. The effective cost of borrowing in Won is currently about 20 percent, or 10 percent in real terms. Korean firms are highly leveraged. The average debt/equity ratio of Korean manufacturing companies at the end of 1988 was 3:1, and has since increased further. Moreover, Korean firms are suffering from technology bottlenecks (recent increases in R&D notwithstanding) due to the lack of long-term capital at competitive cost and a reluctance of advanced countries to transfer technology.

1.4 Although the GOK and the Bank of Korea (BOK) have had every monetary policy instrument at their disposal over the last two decades, they have relied heavily on direct controls to a large scale and on the direction of bank credit to preferred sectors. The low and subsidized interest rates have fostered a chronic condition of excess credit demand. The deregulation of non-bank financial institutions (NBFIs) combined with tight controls on banking institutions have led to the disintermediation of the financial system. The policies which were designed to promote labor intensive industries are no longer appropriate in the present conditions of tight labor. In fact, Korea should now be promoting capital intensive industries and investing more in research and development to remain competitive in the international market. Liberalizing its financial market and giving more autonomy to financial institutions would lead to better allocation of resources, improved efficiency in the financial system, and more sustainable economic growth in the medium- and long-term.

Objectives of the Study

1.5 The objectives of the study are as follows:

(i) to provide an understanding of the functioning of Korea's financial markets and its important institutions, and the monetary policies which have been followed by the BOK;

(ii) to identify the weaknesses in the structure of the financial system and major components of the system (banks, non-banks, and capital markets);

(iii) to assess the effectiveness of the policies (especially interest rates and policy loans) used by the GOK and the BOK in managing the financial system and controlling the economy. This analysis will include the effectiveness of bank supervision and regulations;

(iv) to evaluate the effectiveness of Korea's financial deregulation program to date and the proposed deregulation plan;

(v) to assess the role of the capital market in meeting the investment requirements of industry, the effectiveness of the capital market and its institutions, and the role of foreign investment (especially foreign portfolio investment);

(vi) to study the functioning of the foreign exchange market and the need for capital account transaction liberalization; and

(vii) to advise the Government on the measures that would be required to further improve the health and efficiency of the financial system and its institutions, and on the sequencing of the liberalization of the financial markets.

Organization of the Report

1.6 This report is based on the findings of a Bank mission which visited Korea in September/October 1992. The mission worked very closely with the three Korean research institutes (KDI, KIF and KSRI). The report takes into consideration the findings and recommendations of the institutes which were presented in four papers.[1/] The report is organized into eight chapters. Chapter II provides an overview of macroeconomic development and the macro-financial sector context. The structure and functioning of the money market is covered in Chapter III. Chapter IV analyzes monetary policy procedures and assesses their effectiveness. The rationale for a switch to indirect monetary control is analyzed in this chapter against the background of the experience of other countries. The role of directed credit and its impact on the financial markets in general and monetary policy in particular is discussed in Chapter V. Chapter VI discusses the foreign exchange system and the workings of the foreign exchange market in Korea. A comprehensive review of the present supervision and prudential regulation of the financial sector and suggestions for further improvement are given in Chapter VII. The Korean bond market, its performance and future prospects are covered in Chapter VIII. Proposed financial sector reforms and the recommendations on the sequencing of these reforms are discussed in Chapter IX.

1/ "The Plan for Deregulation of Interest Rates", Jae-Ha Park, Korea Institute of Finance; "Liberalization of the Korean Bond Market", Yeong-Ho Woo, Korea Securities Research Institute and Buhmsoo Choi, KDI; "Deregulation of Credit Allocation", KDI and KIF; "Foreign Exchange and Capital Account Transaction Liberalization in Korea," KDI.

II. MACROECONOMIC CONTEXT FOR FINANCIAL SECTOR REFORM

Introduction

2.1 During most of Korea's development process, the financial sector has been viewed not as important in its own right, but rather as an instrument for accelerating growth in the real economy. This was true especially during the 1970s, which saw a return to low and often negative real interest rate policies. The function of the financial system was viewed as primarily to mobilize resources and to allocate these funds to sectors and activities whose growth was being promoted by the Government. In addition to interest rate controls, this strategy was implemented through government ownership and control of commercial banks and detailed credit allocation schemes.

2.2 These policies did not contribute to the development of the financial sector commensurate with the vitality of Korea's real economy. By the early-1980s, the imbalance between the financial and the real sectors of the economy were obvious to Korean policy makers. In response, a gradual program of financial reforms was initiated and has continued throughout the past decade. This chapter begins by providing an overview of the macroeconomic conditions within which these reforms have been undertaken. Section A describes the steps that were taken in the early-1980s to stabilize the economy and to bring about structural change. The success of this program meant that the economy was well-poised to take advantage of favorable external conditions in the mid-1980s. As a result, growth in 1986-88 accelerated remarkably. These trends, as well as economic developments since 1988, are covered in Section B. Recent changes in the financial system, particularly in light of the Government's ongoing financial sector reforms, are discussed in Section C. Finally, the case for deepening financial sector reforms is made in Section D. The preconditions for further reform, the risks they pose, as well as their potential benefits are discussed.

A. Stabilization and Adjustment During the 1980s

2.3 After a period of rapid growth in GNP averaging almost 9 percent p.a. during 1974-78, it became apparent by 1980 that the Korean economy faced severe internal and external imbalances. In 1980, GNP fell by about 4 percent (for the first time in over a decade), inflation rose to almost 30 percent, and the current account deficit reached 9 percent of GNP. The situation improved marginally in 1981, but inflation was still about 22 percent while the current account deficit stood at about 7 percent of GNP. External debt increased sharply between 1979 and 1981, from about US$15 billion to over US$32 billion.

2.4 The immediate causes of these imbalances were unfavorable external factors. These included the oil price shock of 1979, the increase in international interest rates, and the recession in the OECD that followed. But expansionary monetary and fiscal policies also played a part. Between 1976 and 1979, M2 grew annually at an average rate of between 26 and 40 percent, while the fiscal deficit during 1977-81

averaged about 3 percent of GNP. This expansionary policy stance reflected in part the shift in 1973 in the GOK's strategy from one of general export promotion to one of supporting the growth of heavy and chemical industries. Important planks of this strategy included the provision of preferential tax incentives and subsidized credit to these industries. These measures contributed significantly to monetary growth and the fiscal deficit in the late-1970s.

2.5 The Government reacted swiftly and decisively to these imbalances in 1982. The stabilization strategy consisted of tight monetary and fiscal policies combined with a nominal depreciation of the Won. The tightening of monetary policy is evident in the fall in the annual growth of M2 and of net domestic credit from the banking system from about 27 percent and 39 percent in 1981 to 11 percent and 14 percent in 1984, respectively. Fiscal restraint occurred mainly through controlling public expenditures, and as a result, the consolidated fiscal deficit as a share of GNP fell from 4.4 percent in 1982 to 1.5 percent in 1985. Following a 24 percent devaluation of the Won and the adoption of a managed float in 1980, the Won continued to depreciate in nominal terms continuously until mid-1984. After appreciating briefly in the second half of 1984, another nominal depreciation of 10 percent occurred in 1985. As a result of these policies, the real effective exchange rate depreciated by about 18 percent between 1982 and 1985.

2.6 The effects of the Government's stabilization program were dramatic and immediate. Inflation fell to 4 percent in 1982 and remained at that level for the next three years. The current account deficit narrowed to 3.8 percent of GNP in 1982 and 1 percent in 1985. GNP growth accelerated to almost 12 percent in 1983, and although it slowed in 1985, it was still above 5 percent. The surprising feature of the Government's program was not that it succeeded in restoring internal and external balance, but that it did so with such little pain in terms of lower output and investment. Along with the acceleration in GNP growth, investment demand grew at an average rate of 18 percent in 1983-84. The reasons for these favorable results are to be found both in external factors and in supportive structural policy reforms. Controlling inflation in Korea was facilitated by weaker import prices that reflected the fall in inflation in partner countries and the decline in commodity prices, especially for oil. And reducing the current account deficit was made easier by the OECD recovery that occurred after 1982 and the depreciation of the Won during 1982-83. These favorable external circumstances were complemented by a series of structural reforms whose implementation began during the same period. These reforms included changes in industrial policies, import liberalization, and financial sector liberalization. This section discusses the first two of these, with the last being discussed in greater detail in Section C.

2.7 On industrial policy, the main change that occurred in the early-1980s was the progressive elimination of the system that provided preferential tax and credit benefits to selected industries. It was replaced by a system of government intervention mainly for restructuring unprofitable industries or firms, promoting technology, and enhancing competition. Also, special allocations of credit aimed towards small and medium industries (SMIs) were introduced to reverse the previous bias towards large firms. Efforts to reduce import protection during this

period built on those in the late-1970s with the relaxation of quantitative import controls and reductions in tariff rates. The pace of these reforms accelerated in the 1980s. The proportion of imports on the automatic approval list grew (in terms of number of items) from about 69 percent in 1980, to 85 percent in 1984, and to 94 percent in 1987. By 1984, about three-quarters of all imports in value terms were approved automatically. In 1984, the tariff reform resulted in phased general reductions in tariffs that were aimed at moving towards greater uniformity. As a result, the average tariff fell from 32 percent in 1982 to about 18 percent in 1988. Apart from agriculture, which remained highly protected, these measures succeeded in reducing the level and variation in effective protection.

B. Recent Economic Developments

2.8 This section summarizes the main trends in the Korean economy in the period since 1986.[1]/ Two phases can be distinguished and the discussion is organized around this differentiation--the first period from 1986 to 1988, and the second from 1989 to the present (see Table 2.1 for a summary of macroeconomic indicators).

The Real Sector

2.9 Between 1986 and 1988, GNP grew at an average annual rate of over 12 percent, due mainly to rapid growth in exports, which averaged about 20 percent annually (Table 2.1). This led to large (and rising) current account surpluses in each of these three years. The rapid expansion of exports was brought about by three favorable external factors: lower oil prices, favorable exchange rates, and accelerated economic growth in the OECD countries. Consistent with this remarkable growth in exports, the manufacturing sector grew more rapidly in each of these three years, outstripping the growth of the service sector.

1/ For a more detailed account, see Korea: Country Economic Memorandum, Report No. 10733-KO, September 30, 1992.

Table 2.1: Korea - Recent Macroeconomic Developments, 1986-91
(Percent)

	1986-88	1989-91
Annual Growth Rates (in constant prices)		
GNP	12.8	8.1
Consumption	8.8	10.0
Gross Investment	14.6	18.4
Exports	19.9	3.2
Imports	16.7	16.0
Share of GNP (in current prices)		
Gross Savings	36.5	35.9
Gross Investment	30.4	36.7

Source: Bank of Korea, Economic Statistics Yearbook, 1992.

2.10 The current account surpluses during this period, which rose to US$14.2 billion (or 8.2 percent of GNP) in 1988, obviously corresponded to a surplus of domestic savings over investment. Much of this surplus went towards reducing the stock of external debt, which by end-1985 had risen to US$47.2 billion (or over 50 percent of GNP). Consequently, the stock of debt fell by end-1988 to about US$31 billion (or about 18 percent of GNP).

2.11 The period since 1989 has seen less spectacular growth. GNP growth slowed sharply in 1989 to 6.8 percent. Although it recovered thereafter (Table 2.1), the sources of growth have been significantly different. The main source of growth in the period since 1989 has been domestic rather than export demand. Since 1989 (and including the first half of 1992), the growth of private and public consumption has been faster than GNP growth. From 1989 to 1991, the contribution of net exports to GNP growth was negative. Exports (in Won terms) actually fell in 1989 and recovered only modestly in 1990 and 1991. Meanwhile, average import growth in 1989-91 was over 15 percent. These trends in the external sector appear to have reversed in the first half of 1992, with exports growing at over 12 percent and imports rising only by 7.5 percent. Domestically, consumption growth remained strong in the first half of 1992. While GNP growth in this period slowed to an annual rate of 6.9 percent (from 8.4 percent in 1991), this was achieved mainly because investment grew at less than 3 percent due to the imposition of controls on construction activity.

2.12 As a result of these trade developments, the current account balance, which was so comfortably in surplus in 1986-88, shrank sharply in 1989 and shifted into deficit in 1990. Although the deficit widened to about US$9 billion in 1991 (or about 3 percent of GNP), it narrowed in the first half of 1992, and for the entire year is expected to be about half

its 1991 level. These changes in the current account balance had their counterparts in a widening savings-investment gap in 1990 and 1991. However, as Table 2.1 shows, this reflected not a falling domestic savings rate, which stabilized at a level higher than in 1986-88, but buoyant investment. Both construction and equipment investment boomed in 1989-91. And since consumption expenditures were also rising rapidly, these kept import growth high. During this period, the construction sector replaced manufacturing as the fastest-growing sector of the economy.

2.13 The differences in macroeconomic outcomes during this period, relative to 1986-88, were partly due to a less favorable external environment. The real effective exchange rate appreciated almost 25 percent between 1987 and 1989, and while it depreciated slightly in 1990, its appreciation again in 1991 brought it back to its 1989 level. Also, growth in OECD countries slowed during this period. However, the more significant changes occurred domestically. As political liberalization proceeded, wage demands and labor disputes escalated, leading to sharply higher unit labor costs in Korean manufacturing that hurt its competitiveness in export markets. Moreover, consumption expenditures (particularly on durables) and housing construction rose rapidly, compensating for their repression in earlier years.

Monetary and Fiscal Trends

2.14 As a result of external surpluses, reserve money growth accelerated between 1986 and 1988. Although BOK attempted to sterilize these increases, mainly by issuing monetary stabilization bonds (MSBs) at an unprecedented pace, it was unable to offset them entirely. Consequently, they translated into accelerated growth of the monetary aggregates--M2 growth averaged about 18 percent each year during 1986-88, while M3 rose by almost 30 percent each year (Chapter IV). Since 1989, the external sector has become less important as a source of reserve money growth as the current account balance has switched into deficit. Instead, reserve money growth has come mostly from the expansion of domestic credit by BOK to achieve such policy objectives as compensating commercial banks for making policy loans to preferred sectors and bailing out investment companies.

2.15 The 1986-88 period was noteworthy also because it saw the emergence of a surplus in the Government's consolidated fiscal accounts (including financial and non-financial public enterprises). The surplus in 1986 was small and grew to about 2 percent of GNP in 1988. It shrank thereafter, and in 1990 a small deficit of about 1.2 percent of GNP reemerged, and remained at about that level in 1991. These deficits reflect the substantial increases in capital expenditures, primarily for housing and infrastructure, and the expansion of local government budgets that have occurred over the last three years. The 1992 budget, with expenditures about 13 percent higher than 1991 levels, is expected to have a comparable deficit (as a share of GNP).

Price Trends

2.16 During 1986-88, prices both at the wholesale and consumer level remained relatively stable despite the economic boom and the large wage increases in the latter two years. An important reason was the appreciation of the Won in 1988, which moderated increases in the domestic price of imported manufactures. But between 1989 and 1991, inflationary pressures intensified with both consumer and wholesale price inflation registering their highest levels since 1981. This rise in the inflation rate was due to wage pressures as well as an expansionary monetary stance. Manufacturing wages rose by 20 percent and 17 percent in 1990 and 1991, following a rise of over 25 percent in 1989. Also, as noted earlier, M2 and M3 grew annually at average rates of almost 20 and 30 percent in 1989 and 1990. Consumer and wholesale price inflation slowed in the first-half of 1992 to about 3.5 percent and 6.8 percent, respectively. These decreases appear to reflect a somewhat tighter monetary stance, which saw M2 and M3 growth in 1991 and the first half of 1992 fall slightly relative to 1991, as well as administrative curbs on construction activity that have slowed the economy.

C. Recent Changes in the Financial System

2.17 Reform of the financial sector in Korea has been a deliberate process that has been ongoing since the early-1980s. It began in 1981 with the Government's divestiture of its equity holdings in three commercial banks, and has since involved changes in a variety of areas, including changes in licensing requirements for new financial institutions, decontrol of interest rates, changes in credit allocation policies, and liberalization of capital flows. These reforms have had a significant impact on domestic savings and its financialization, the structure of the financial system, the conduct of monetary policy, the fragmentation of financial markets, and the openness of the capital account.

Financialization of Savings

2.18 During the 1970s, the deepening of the financial sector in Korea was hampered by negative real interest rates. As a result of interest rate reforms and the fall in inflation, financial sector development accelerated in the early to mid-1980s. As Table 2.2 shows, several measures of financial deepening grew rapidly during this period. The ratio of broad money (M2) to GNP rose from 0.32 in 1979 to 0.41 by 1990. Broader measures of financial depth rose even more dramatically. The ratio of M3 to GNP has increased continuously from 1979 onwards, almost tripling by 1991. Domestic financial assets as a share of GNP have almost doubled over this period. The more rapid growth in the broader ratios of financial depth than in the ratio of M2 to GNP shows that the pace of financial development was dictated by factors beyond the establishment of real positive interest rates.

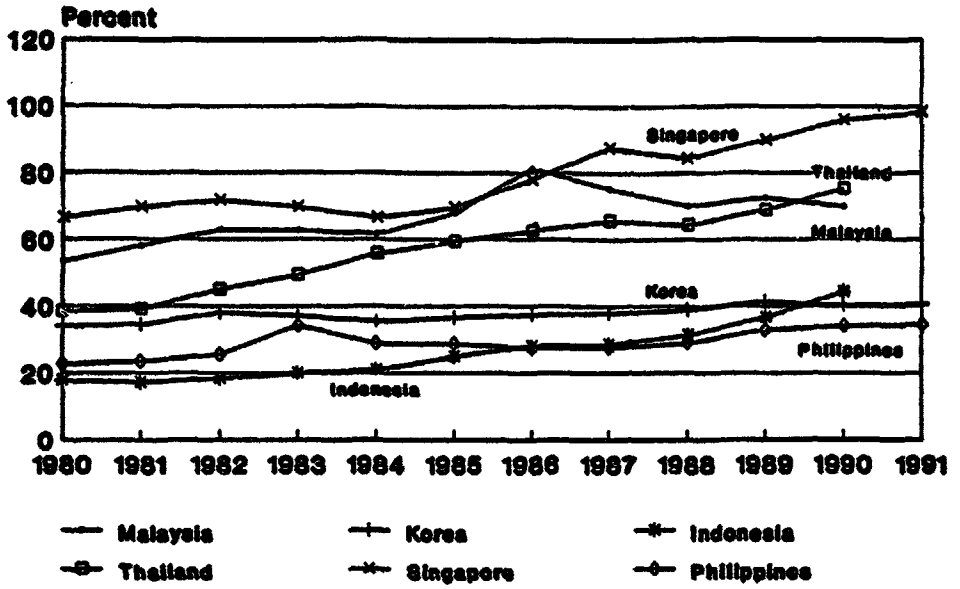
Table 2.2: Korea - Measures of Financial Deepening, 1986-91

Year	GNP	M1	M2	M3	Fin. Assets	M1/GNP	M2/GNP	M3/GNP	FA/GNP
	(Trillions of Won)					Ratios			
1986	90.6	8.8	33.8	71.6		0.10	0.37	0.79	
1987	106.0	10.1	40.3	93.6		0.10	0.38	0.88	
1988	126.2	12.2	48.9	120.4		0.10	0.39	0.95	
1989	141.8	14.3	58.6	153.8	548.5	0.10	0.41	1.08	3.87
1990	171.5	15.9	68.7	197.8	679.2	0.09	0.40	1.15	3.96
1991	206.0	21.8	83.7	244.0	826.7	0.11	0.41	1.18	4.01

Source: Bank of Korea, Economic Statistics Yearbook, 1992.

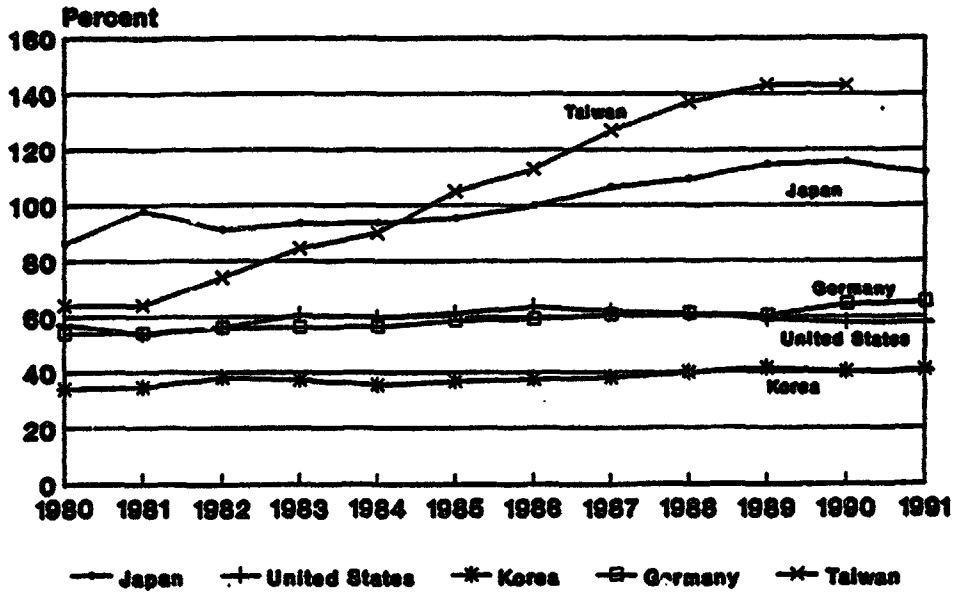
2.19 The more rapid growth in M3 compared to M2 reflects the expansion of NBFIs as a result of the regulatory advantages that they continued to enjoy (including less stringent interest rate controls). The expansion of financial assets during the 1980s also reflects the growing role of securities markets and the introduction of new financial assets. However, despite these increases in the depth of Korea's financial sector during the last decade, the controls that remain on financial sector activity have meant that it is less developed than in other countries. Chart 2.1 illustrates this by comparing the ratio of M2 to GNP in Korea with other East Asian countries. Chart 2.2 compares the ratio of M2 to GNP in Korea with three selected OECD countries (the United States, Japan, Germany) and Taiwan. The development of the financial sector in Korea is clearly behind these countries.

Chart 2.1: M2/GNP - Korea versus ASEAN Economies, 1980-91



Source: IMF, International Financial Statistics, October 1992.

Chart 2.2: M2/GNP - Korea versus Selected OECD Economies and Taiwan, 1980-91



Source: IMF, International Financial Statistics, October 1992;
Taiwan Statistical Databook, 1991.

2.20 Since 1980, the gross national savings rate increased steadily, but the most dramatic upward shifts occurred in 1986 and 1987 (Table 2.3). While the 1988 rate was even higher, its subsequent fall in 1990 and 1991 indicates that the increase may have been transitory. However, a savings rate of 36 percent, which was the average of the last three years, is still a remarkable increase over a period of little more than a decade. Even more dramatic has been the behavior of household savings. This rate almost tripled between 1980 and 1991 (Table 2.3). While the maintenance of positive real interest rates clearly contributed to higher savings, it appears that the sharp rise in household incomes since the mid-1980s may have been a more important influence. Apart from this sharp increase in the household savings rate, the other source of higher savings has been the increase in the corporate savings rate, which rose from an average of a 10 percent level in the 1970s and 1980s to an average of about 17 percent during 1988-1990. These remarkably high savings rates, combined with the constancy of government savings mean that continued high real interest rates in Korea cannot be fully attributed to lack of capital. One of the reasons for the high intermediation cost in Korea is the lack of competition in the financial system.

Table 2.3: Korea - Saving and Investment, 1986-91
(Percent)

	1986	1987	1988	1989	1990	1991
Gross Savings	0.33	0.37	0.39	0.35	0.36	0.36
Household	0.15	0.16	0.18	0.17	0.17	n.a.
Corporate	0.12	0.13	0.13	0.10	0.10	n.a.
Government	0.06	0.07	0.08	0.08	0.09	0.08
Gross Investment	0.29	0.30	0.31	0.34	0.37	0.39
Gross pvt cap form	0.25	0.26	0.27	0.30	0.33	0.34
Gross gov cap form	0.04	0.04	0.04	0.04	0.04	0.05

Source: Bank of Korea, Economic Statistics Yearbook, various issues.

Structure of the Financial System

2.21 In 1981, the Government divested itself of the ownership of three nationwide city banks (NCBs), and by 1983 all NCBs were privately owned. Actions were also taken to increase the autonomy of commercial banks by reducing the Government's influence on managerial appointments and eliminating the system of detailed credit controls as the principal tool of monetary policy. A number of steps were also taken to encourage competition among financial institutions. Two new NCBs were licensed in 1982 and 1983--both joint ventures with foreign banks. In 1985, the licensing requirements for new NBFIs were relaxed so as to reduce entry

barriers.[2]/ The local branches of foreign banks have also been allowed to compete with domestic institutions in providing some financial services. Finally, some of the regulatory differences between commercial banks and NBFIs, which had favored the latter, have been removed. The intention of these regulatory changes has been to level the playing field between these institutions, and thereby to promote competition. As a result, commercial banks have been allowed to engage in activities that had previously been reserved for NBFIs, such as issuing CDs, operating trust accounts, and dealing in commercial paper, as well as owning NBFIs as subsidiaries. Furthermore, the interest rate differential between DMBs and NBFIs (both on loans and deposits) was progressively decreased between 1984 and 1987[3]/.

2.22 However, as the divergence in growth between M2 and M3 indicated, NBFIs have grown much faster than deposit money banks during the 1980s. Table 2.4 summarizes the relative shares of various segments of the financial system both in terms of deposits and loans. The growth of NBFIs reflects the Government's success in moving funds from the curb markets (which had grown when real interest rates were negative during the 1970s) into the organized financial sector. The curb financial market has now effectively been integrated into the organized sector. Whereas the curb market accounted for about 10 percent of financial savings in 1985, it is now reportedly negligible in size. Its business both on the deposit and lending side has been taken over by NBFIs. The main beneficiaries of this integration have been large savers who now enjoy significantly higher returns on funds invested in NBFIs than they did before in non-financial assets or in the banking system.

Table 2.4: Korea - Total Financial Assets, 1986-92
(Billions of Won)

	1986	1987	1988	1989	1990	1991	6/1992
Deposit Money Banks	76,204	90,204	104,664	124,723	158,444	187,196	188,173
NBFIs	73,874	92,224	121,172	159,893	215,833	271,739	291,437
Total	150,078	182,428	225,836	284,616	374,277	458,935	479,610
NBFIs as % of Total	49.2%	50.6%	53.7%	56.2%	57.7%	59.2%	60.8%

Note: Trust accounts included in NBFI assets.
Source: Bank of Korea.

2/ The NBFI sector in Korea consists of development banks, investment companies (including merchant banks, investment and finance companies, and investment trusts), savings institutions (including mutual savings and finance companies, credit unions, and mutual credits), and insurance companies. The use of the acronym in this chapter should be understood to apply only to investment companies, which most closely resemble banking institutions.

3/ Moreover, interest rate controls on loans are applied less stringently to NBFIs than banks.

2.23 Some of the financial reforms of the 1980s reduced the regulatory advantages enjoyed by NBFIs relative to banks. But these institutions still continued to be able to offer savers higher interest rates than banks, and faced fewer government-imposed limits on the management of assets and liabilities. Moreover, entry restrictions into this segment of the financial market were also eased. Finally (and as discussed further below), these institutions are not constrained by monetary tightening (which uses M2 as the intermediate target). Consequently, corporate borrowers have turned to NBFIs during periods in which bank credit has been squeezed. The result has been the explosive growth in their share of total assets (Table 2.4).

2.24 Another structural change in the financial system that occurred during the 1980s was the growth in segments of the market that are not subject to interest rate controls--in particular, the markets for commercial paper and corporate bonds.[4/] Despite the steps that were taken towards deregulating interest rates on bank loans, deposit rates have remained low and tightly controlled. In part, this has led to disintermediation of the banking sector by encouraging savers to deposit funds in NBFIs. But funds have also flowed into the commercial paper, corporate bond, and (until the downturn in 1990) stock markets because yields in these markets are determined primarily by market forces. As a result, the share of financial savings held as securities of various kinds increased from about 21 percent (in gross terms) in 1979 to about 30 percent in 1991.[5/]

Segmentation of Financial Markets

2.25 Among the main problems that have affected the financial sector in Korea is its segmentation. As a result of the controls and regulations that have been placed on it, different borrowers are charged widely-varying interest rates on borrowed funds, even for investments that involve the same degree of risk. Such segmentation is inefficient because it implies that many projects that deserve financing are rationed of credit while others with lower rates of return are financed. Policy makers in Korea have been aware of such segmentation and the attendant inefficiency. Therefore, many of the policy changes that were made during the 1980s were intended to unify various segments of the financial market.

2.26 Some progress in reducing segmentation has occurred, especially relative to the 1970s. One measure of this is shown by Table 2.5, which compares the average cost of borrowing across manufacturing firms that differed by size, export orientation and industrial subsector. Along all three attributes, the gap has narrowed since 1980 although there have been swings in both directions. The largest and most consistent decrease has been in the preferential access to funds of the export sector, and of

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4/ But as discussed in detail in Chapter V, other restrictions have stunted the development of the corporate bond market.

5/ See Nam (1992).

heavy industry.[6]/ Each of these changes is a result of the policy changes in the early-1980s that reduced preferential lending to these sectors and abolished lending at subsidized rates to these sectors. To the extent that those reforms reduced the range and coverage of preferential interest rates on loans, the sectoral biases in the pricing of credit have been narrowed and the segmentation of the credit market reduced. Banks now have more freedom to price their loans according to their riskiness.

Table 2.5: Korea - Average Cost of Borrowing in the Manufacturing Sector, 1980-91
(Percent)

	1980	1985	1989	1990	1991
All Manufacturing	18.7	13.4	13.6	12.7	13.0
Large	18.4	13.3	13.4	12.3	12.7
Medium	20.7	14.4	14.5	14.4	14.3
(Medium-Large)	2.3	1.1	1.1	2.1	1.6
Export	16.0	13.0	14.1	12.6	12.7
Domestic	21.0	13.6	13.4	12.8	13.1
(Domestic-Large)	5.0	0.6	-0.7	0.2	0.4
Heavy	17.6	12.7	13.5	12.5	12.7
Light	20.1	14.8	13.8	13.1	13.5
(Light-Heavy)	2.5	2.1	0.3	0.6	0.8

Source: Bank of Korea, Financial Statement Analysis, various issues.

2.27 Despite the narrowing of the interest rate differentials noted earlier, a substantial amount of policy-induced segmentation remains (Chapter V). The sizable volume of policy loans, stringent interest rate controls on loans and deposits, and differential regulatory treatment of various segments of the financial system all contribute to this fragmentation. Somewhat ironically, the recent rapid growth of NBFIs, although induced by their regulatory privileges, has probably worked to reduce the segmentation of financial markets. Because these institutions are less constrained by interest rate controls and credit allocation requirements, they are freer to finance economically viable projects and to vary their lending rates according to the riskiness of projects and borrowers.

Opening of the Capital Account

2.28 Chapter VI provides a detailed discussion of the capital

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[6]/ Cho and Cole (1992) also show that the differentials in average borrowing costs across manufacturing subsectors narrowed significantly between the 1970s and the 1980s (p. 130).

account. Liberalization of capital flows has also been undertaken cautiously since 1981. Until then, strict controls were maintained on both inflows and outflows of capital. Since 1984, inflows of portfolio investment have been liberalized progressively. Initially, limited investment was allowed in Korean stocks by foreigners through investment funds, foreign securities companies were allowed to open representative offices, and Korean companies were permitted to raise foreign capital through equity-linked bonds. In 1992, foreigners were allowed to invest directly in Korean stocks subject to limits. Also, free capital repatriation is now allowed. However, foreign borrowing by Korean companies is still not allowed and Koreans cannot hold foreign currency deposits. Chapter VI discusses the GOK's policy for capital market liberalization.

D. Preconditions for Further Financial Sector Reform

2.29 Experience points to three key preconditions if programs of financial sector reform are to succeed. First, it is essential that there be macroeconomic stability. If interest rates are liberalized when inflation is high and variable, the result is usually high levels of real interest rates. Lenders respond to uncertainty about inflation by widening the spread between deposit and lending rates. Also, liberalizing the capital account in this situation leads to large capital inflows and causes the real exchange rate to appreciate sharply with serious adverse effects on the tradeable goods sector.

2.30 These theoretical arguments square with the experiences of the Southern Cone countries (Chile, Uruguay and Argentina) when they undertook ambitious financial sector reforms in the mid-1970s.[7/] The measures that were implemented included liberalizing interest rates and capital controls, eliminating credit allocation schemes, and privatizing domestic banks while promoting the entry of new banks. However, as their experience illustrates, even far-reaching financial reforms can be an expensive failure if implemented when serious macroeconomic imbalances exist. In all these countries, real interest rates remained extremely high even after the financial reforms, and despite liberalization of the capital account. Moreover, large capital inflows led to real exchange rate appreciation that hurt exports and led to monetary expansion that continued to feed inflationary expectations. Eventually, all three countries were forced to abandon their reform programs in the face of the failures of corporations and financial institutions.

2.31 Korea's macroeconomy is stable. Although the current account shows a deficit, it has fallen sharply this year, and the deficit is sustainable since adequate flows of foreign financing are available. The consolidated public sector account is roughly in balance. And finally, the inflation rate is falling after having risen to almost double-digit levels in 1991.

7/ See Edwards and Cox-Edwards (1987) for details concerning the Chilean experience.

2.32 Second, significant liberalization of the real economy should either be completed or carried out simultaneously with the reform of the domestic financial sector. If domestic prices are distorted substantially due to protection, investment incentives or price controls, it is possible that when liberalized, the domestic financial sector will respond to the wrong price signals. The sectoral allocation of resources could, therefore, be worsened as a result. This happened in Chile, for instance, during its first attempt at financial reform in the 1970s. The real appreciation of the exchange rate that resulted from opening the capital account meant that incentives favored the non-tradeables sector even more than before. Over-investment in these sectors, particularly real estate, and a subsequent collapse were the results.

2.33 Substantial liberalization has also occurred in the real sector. Industrial policy is now less interventionist and sector-specific. It relies instead on functional support of industries dictated by market failure. Similarly, the trade regime is now less protectionist. Tariffs have been lowered and made more uniform and the coverage of quantitative restrictions reduced. In November 1988, Korea also accepted the obligations of Article VIII of the IMF, implying that it is committed to full liberalization of the current account.

2.34 Another key consideration that points towards success in liberalizing the financial sector is the Government's enviable record of implementing past reform programs. Whether in undertaking macroeconomic stabilization in the early-1980s or trade liberalization in the latter half of the 1980s, the Government has announced its intentions with a detailed blueprint and then stayed the course with its policy changes. For this reason, the policy credibility of the Government is extremely high.

2.35 Third, it is essential that a strong framework for prudential regulation and bank supervision be in place when financial reform occurs. A relatively well-developed system of prudential supervision is in place in Korea since the Government has historically exercised strong control over the financial system. The details of this framework and the main area in which this system should be strengthened to support financial sector reforms are discussed in Chapter VII of this report.

2.36 Proposed financial sector reforms, their sequencing, as well as the costs and benefits of such reforms, are discussed in Chapter IX.

III. STRUCTURE AND FUNCTIONING OF THE MONEY MARKET

Introduction

3.1 A well developed money market is a precondition for implementing indirect monetary controls. The main features of such a market would include: (i) availability of broad range of money market instruments with ample liquidity; (ii) market based pricing of instruments at different maturities and risks; (iii) a large number of active market participants i.e., investors, dealers, brokers; (iv) ready access to market information by all participants; (v) well functioning credit rating organizations; and (vi) an efficient system of clearing and settlement of trades. Indirect monetary control procedures will function well under these conditions. This chapter discusses the structure and functioning of the Korean money market and identifies areas which need to be strengthened.

A. Nature and Organization of the Money Market[1/]

3.2 The money market is broadly defined to include all instruments easily converted into cash that are used by governments and financial and commercial institutions for short-term funding and placements. The money market provides market participants with various instruments to intermediate their short-term demand for and supply of funds. In Korea, the money market developed in the 1960s with the issuance of Monetary Stabilization Bonds (MSBs) (1961) and Treasury Bills (1967). It now embraces a wide range of financial instruments, including: Commercial Paper (CP), Negotiable Certificates of Deposit (CDs) (1974), Repurchase Agreements (RPs), Bankers Acceptances (BAs) (1989), and Call Money Market (inter-bank market). The Government made a conscious effort to develop this market to bring the curb market into the organized financial system with the promulgation of the Short-term Financing Business Act, and the establishment of investment and finance companies and the call transaction center in the Korea Bankers' Association. The largest segments of the money market are call money, commercial paper and MSBs.

Call Money Market

3.3 The call money market was established in 1975 with a view to alleviating very short-term shortages or surpluses of funds among financial institutions. The participants in the call money market are nationwide commercial banks, specialized banks, regional banks, investment and finance companies, merchant banking corporations, investment trust companies, insurance companies, the Korea Securities Finance Corporation, the Credit Insurance Fund, and foreign bank branches in Korea. The Government designated six investment and finance companies and the Korea

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1/ This and other sections of this chapter have benefitted from the study, "Money and Monetary Policy in Korea," 1990, by Moon-Soo Kang, Korea Development Institute, Seoul.

Financial Clearing Institute (KFCI) as dealers in the call money market. At the beginning, the market dealt with four types of transactions according to maturity: overnight loans, 3-day loans, 7-day loans, and 15-day loans. Call transactions were made in multiples of W 100 million.

3.4 The call market was originally divided into two segments: the exchange market (mainly for banks) and the over-the-counter market (mainly for non-bank financial institutions or NBFIs). Major borrowers in the exchange market were nationwide commercial banks, which often were short of funds. In this market, the inter-bank rate was allowed to move freely, though in practice its movement was hamstrung by money market regulations of one type or another, thereby attenuating its market character. Often times, the demand of borrowing institutions, which were the nationwide commercial banks, went unsatisfied. In such situations, the regulatory authorities intervened to allocate the funds to nationwide banks before considering the requirements of other financial institutions. This meant effectively a restriction on competitiveness in the money market for funds from the NBFIs. Furthermore, there was a ceiling on borrowing by the market participants equal to 5 percent of their average deposit balances during two months prior to the transactions.

3.5 This restricted access by the NBFIs left them to rely on the over-the-counter markets, where the funds were borrowed or lent at rates higher than in the exchange market, which could be considered to be market determined. Until 1989, when both these segments of the money market were integrated, the average interest rate in the exchange market was around 12 percent, which was lower by three percentage points than the rate prevailing in the over-the-counter market.

3.6 Since October 1989, the Government has integrated the two exchanges and the over-the-counter markets into a single market to improve the efficiency of the money market. Seven dealers--six investment and finance companies and the KFCI--were appointed to deal in the market. The new integrated call money market has the following characteristics: (i) all financial institutions, about 240 institutions, participate in the integrated call money market; (ii) transactions can be implemented either through designated dealers or directly between market participants; (iii) the maturity period of transactions changed from the earlier four categories to seven--overnight loans, and 3, 5, 7, 9, 11 and 15 day loans; (iv) the ceiling on the maximum amount of borrowing by each participant and the restrictions on the hours of transactions were repealed; and (v) reserve accounts at BOK when a bank transacts with another bank could be used for clearing purposes; in all other cases transactions are settled through bank account transfers through dealers' notice; call rates were freed from any restrictions. Table 3.1 details the main characteristics of the money market before and after integration.

3.7 The consequences of the integrated inter-bank money market were dramatic. As evident from Table 3.2, the average balances in the inter-bank market ballooned from W 634.4 billion as of end-1988 to W 3,118.7 billion by end-1991. At the same time, the role of NBFIs in money market transactions increased in relation to that of banks. Thus, direct transactions between banks diminished from 33.8 percent in 1989 to just 3.2 percent in 1990. However, the call rate in the call money market differed for transactions between banks and between the NBFIs. As of June

1992, the banks, securities companies and investment trust companies were net borrowers in the inter-bank market, as against short-term finance companies and insurance companies which have been net lenders (Table 3.3). It was observed that the margins between these two rates generally hovered between 2-3 percentage points, thereby reflecting a lack of full competition in the money market. The reasons for this may well be that the banks, faced with ceilings on the main items of their liabilities and assets under a regime of regulated interest rate policy in Korea, are loath to face higher interest rates on their borrowing, determined competitively in the money market.

Table 3.1: Korea - Changes in Characteristics of the Money Market, Post-1989

	Pre-Integrated Call Market		Integrated
	Exchange Market	Over the counter Market (unofficial market)	
Participants	Mainly banks /a	Non-bank financial institutions /b	All financial institutions
Transaction by type	Concentrate in the Call Transaction Center	Over-the-counter market	Over-the-counter market through seven brokers /c
Maturities	1,3,7,15 days	1,3,7,15 days	1,3,5,7,9,11,15 days
Ceiling on call money	Within a five percent of average deposits recorded two months ago	No restrictions	No restrictions
Transaction time	From Monday to Friday: 13:30-16:30 Sat.: 10:00-12:30	No restrictions	No restrictions
Interest rates	Single rate which can implement most transactions	Freely determined rates at each transactions	Same with the left
Clearing system	Through BOK's reserve accounts of each banks	Through individual current accounts at banks	Inter-bank transactions: through BOK's reserve accounts Others: through transfer of banks' account according to brokers' notice
Fees	5/100,000%	None	5/100,000%
Collateral	Generally without collateral	Without collateral	Without collateral

/a Participants in the exchange market (official market): Banks (including foreign bank branches); National Investment Fund, Investment and Finance Companies (IFC), Merchant Banking Corporations (MBC), Investment Trust Companies (ITC), insurance companies, Korea Securities Finance.

/b Participants in the over-the-counter market (unofficial market): IFC, MBC, insurance companies, KEFC, CIF, securities companies, lease companies, mutual savings and finance companies.

/c The previous Call Transactions Center and the six IFCs are approved as broker.

Source: Ministry of Finance, Bank of Korea.

Table 3.2: Korea - Money Market Trends, 1980-91
(Billions of Won)

	1980		1985		1987		1988		1989		1990		1991	
	Amt.	%	Amt.	%	Amt.	%	Amt.	%	Amt.	%	Amt.	%	Amt.	%
Call Market /a	178.7	7.0	432.7	3.6	490.7	2.1	634.4	1.9	1,152.3	2.6	3,396.9	6.3	3,118.7	5.6
Commercial Paper /b	2,083.3	81.9	7,283.0	61.2	9,432.3	40.2	12,330.6	36.7	19,207.5	43.0	22,863.4	42.4	22,051.5	40.0
RPs /c	129.5	5.1	2,562.7	21.3	2,720.9	11.5	2,380.1	7.1	2,146.0	4.8	2,410.9	4.5	3,594.6	6.5
Negotiable CDs /d			1,080.9	9.0	1,651.4	7.0	1,752.7	5.2	1,847.7	4.1	6,803.5	12.6	9,940.0	17.9
Commercial Bill /a			46.4	0.4	3.0		8.4		1.1		1.8		7.3	
Bankers Acceptances									1,040.8	2.3	680.5	1.2	1,162.2	2.1
Treasury Bills /d	150.0	5.9			1,000.0	4.2	1,130.0	3.4	1,923.7	4.3	2,500.0	4.6	2,207.2	4.0
MSBs	3.2	0.1	504.1	4.2	8,174.5	34.7	15,373.5	45.7	17,305.5	38.8	15,240.5	28.3	13,496.5	24.3
Total (A)	2,544.7	100.0	11,909.8	100.0	23,472.8	100.0	33,609.7	100.0	44,624.6	100.0	53,897.5	100.0	55,578.0	100.0
M1 (B)	3,807.0		7,557.8		10,107.3		12,151.4		14,329.0		15,905.3		21,752.4	
M3 (C)	17,962.2		55,450.0		93,637.7		120,358.6		153,831.2		197,847.0		243,955.9	
Nominal GNP (D)	36,672.3		78,088.4		106,024.4		126,230.5		141,794.4		171,488.1		206,026.5	
A/B (%)	66.8		159.1		233.1		276.9		311.4		338.9		255.5	
A/C (%)	14.2		21.5		25.1		27.8		29.0		27.2		22.8	
A/D (%)	6.9		15.4		22.1		26.6		31.5		31.4		30.0	

/a Daily average balances, daily average balances for December in 1990 and 1991.
/b Balances of discounts.
/c Balances of sales.
/d Balances of issuance.

Source: Ministry of Finance, Bank of Korea.

Table 3.3: Korea - Structure of Call Money Transactions
(Billions of Won)

		CALL MONEY (B)						
		Banks	Short-term Finance Companies	Securities Companies	Insurance Companies	Investment Trust Companies	Others	Call Loan Total
CALL LOANS (A)	Banks	1,917.9	5,213.9	-	-	-	12.1	7,143.9
	Short-Term Finance Companies	14,822.5	3,380.0	6,430.7	-	40,421.3	2,581.7	57,639.2
	Securities Companies	-	1,992.8	-	-	-	-	1,992.8
	Insurance Companies	6.3	1,232.3	-	-	-	28.1	1,266.7
	Investment Trust Companies	-	29,625.4	2.0	-	-	-	29,627.4
	Others	2.3	13,116.5	59.5	1.7	-	3.0	13,183.0
Call Money Total		16,749.0 (15.1)	54,563.9 (49.2)	6,492.2 (5.9)	1.7 (0.0)	30,421.3 (27.4)	2,624.9 (2.4)	110,853.0 (100.0)
Net Position (A-B)		-9,605.1	3,075.3	-4,499.4	1,265.0	-793.9	10,558.1	

Source: Moon-Sou Kang, Money Markets and Monetary Policy in Korea, 1990, Korea Development Institute.

Commercial Paper Market

3.8 Commercial paper (CP) is a short-term promissory note which is issued by eligible non-financial companies, investment and finance companies, and merchant banking corporations. Thirty-two investment and finance companies and six merchant banking corporations engage in the short-term financing business as dealers in commercial paper. Only those business firms which are selected as eligible firms by investment and finance companies can issue commercial paper. For business firms, commercial paper is issued usually as a substitute for short-term bank loans. Broadly speaking, there are five kinds of instruments in the commercial paper market: (i) the "own paper" which is issued by investment and finance companies and merchant banking corporations themselves; (ii) the resold note with recourse which is issued by business firms and whose payments are guaranteed by dealers; (iii) the resold note without recourse which is issued by business firms but whose payments are not guaranteed by dealers; (iv) CP introduced in June 1981 with longer maturities and larger minimum denominations than other instruments explained above; and (v) a Cash Management Account (CMA), the yield of which is linked to the rate of return from pooled commercial paper (accepted by dealers) and other financial assets.

3.9 The CP, however, was integrated into the category of resold notes without recourse in December 1988. The commercial paper market has been one of the most rapidly developing money markets since its establishment in August 1972, and it is the largest sector among the money markets. At the end of 1991, the outstanding amount of commercial paper discounted amounted to W 22.1 trillion, accounting for 8.8 percent of external funds raised by the corporate business sector. However, there is no active secondary market in commercial paper, though commercial paper can be redeemed from dealers before maturity with specified loss of interest. Investment and finance companies have been the dominant players among dealers in the commercial paper market, accounting for 98.3 percent of sales as of the end of 1989. Investment and finance companies (IFCs) and merchant banking corporations (MBCs) used to adjust the amount of the de facto compensating balances according to the degree of tightness of fund availability in the money market when interest rates were regulated in the commercial paper market. When IFCs and MBCs discounted the commercial paper issued by their clients (borrowers), they asked their borrowers to set aside a portion of the borrowing and to buy "own paper" or "resold commercial paper without recourse" that offered interest rates lower then the discount rates of the commercial paper. Thus, the compensating balance raised the effective discount rate, or the cost of borrowing from IFCs and MBCs, which was a cause of many complaints from the borrowers. In 1989, the MOF asked short-term finance companies (STFC), to abolish their practice of requiring their borrowers to deposit de facto compensating balances when they discounted the commercial paper of their clients. The MOF included the abolition of compensating balances as one of the preconditions for allowing STFCs to open additional business offices, which was vital to their competing with other financial institutions, as well as among themselves in the financial market.

3.10 During the first four months after the policy announcement by the MOF, November 1989-February 1990, compensating balances at STFCs were

reduced sharply. The abolition of compensating balances at STFCs resulted in bringing about effective interest rate liberalization in the commercial paper market. STFCs began to charge market related interest rates to borrowers, which were higher than before. The commercial paper interest rate thus rose to 13.95 percent at the end of November, from 13.41 percent at the end of October 1989. At the end of February 1990, the commercial paper interest rate climbed up to 14.05 percent. Since interest rates on commercial paper are essentially market determined, they are probably the best available indicator of market interest rates in Korea.

Negotiable Certificates of Deposit Market

3.11 A negotiable certificate of deposit (CD) is a certificate issued by a bank as evidence that a certain amount of money has been deposited for a fixed period of time and will be redeemed with interest at maturity. The certificate specifies the amount of the deposit, the maturity date and the interest rate. The certificate is negotiable and can be traded on the secondary market. CD business received a setback in December 1981 because of poor performance, but nationwide commercial banks, regional banks and the Korea Exchange Bank resumed the CD business in June 1984. In March 1985, the CD business was opened to all banking institutions. The reintroduction of CDs was designed to promote banks' competitiveness with NBFIs in attracting short-term deposits by offering a higher interest rate than that applied to ordinary time deposits. The minimum denomination of CDs was lowered from W 100 million to W 50 million in February 1987 and the maturity period set between 91 days and 180 days. The scale of the CD market has gradually expanded since 1984; at the end of October 1991 the outstanding amount of CDs amounted to W 9,940 billion, compared to W 1,080 billion at the end of 1985. At the end of October 1991, specialized banks and nationwide commercial banks commanded shares of 40.3 percent and 33.5 percent, respectively, in the CD market. At the end of 1989, corporate enterprises and individuals held, respectively, 39.9 percent and 30.9 percent of CDs issued by banks, while financial institutions such as investment and finance companies and investment trust companies held 21.1 percent of CDs as reserves.

3.12 Investment and finance companies, securities companies and merchant banking corporations trade negotiable CDs on the secondary market. However, the secondary market is inactive. The amount of monthly secondary market transactions in the CD market, however, was only W 66.5 billion in 1989, or 0.5 percent of the outstanding amount of CDs.

Repurchase Agreements Market

3.13 A standard repurchase agreement (RP) involves the acquisition of immediately available funds through the sale of securities with a simultaneous commitment to repurchase the same securities on a specified date within one year at a specified price, which includes interest. RP transactions have many characteristics of secured lending arrangements in which underlying securities serve as collateral. Securities eligible for RP transactions are national bonds, local bonds, special bonds, and corporate bonds. RPs were first introduced in February 1977 when the

Korea Securities Finance Corporate (KSFC) made RP transactions with securities companies. Securities companies and banks have been allowed to engage in RP business since 1980. Post offices have been licensed to handle this business since March 1983. Banks and post offices have been, however, permitted to handle only the sale of government and public bonds on repurchase agreements.

3.14 The major suppliers of bonds--that is, borrowers of funds--in the RP market are securities companies, banks, post offices and business corporations. The major lenders are individual investors and non-profit organizations. The minimum transaction unit is W 100 million.

3.15 The duration of RP transactions differs according to the transacting institution. The period of transaction is limited to less than one year for the KSFC and securities companies. For banks, the period of RP transaction is limited to between 91 days and one year. For post office saving bonds, the period of transaction is restricted to less than 91 days. For large RPs, the minimum transaction unit is W 50 million and the period of transaction is between 6 months and one year. The scale of the RP market has rapidly increased in the past nine years. The outstanding amount of sales of repurchase agreements reached W 3,6 trillion at the end of 1991, 35 times the balance at the end of 1980. At the end of 1989, the outstanding amount of purchases by the KSFC and securities companies was, however, just 3.3 percent of that of sales on repurchase agreements.

Treasury Bill Market

3.16 Treasury bills (TBs) are short-term obligations of the Government. Since the Treasury bills are considered to be totally risk free they are generally the most marketable of all money market instruments and the T-Bill rates are used as benchmark for pricing other short and long instruments. The maximum amount of issuance of TBs in each fiscal year is decided by the National Assembly as part of annual budget deliberations. Treasury bills have to be redeemed within one year. Since 1967, TBs have been issued to help monetary management policy, except in 1981. In that year, TBs were issued to finance a temporary shortage of Treasury funds. The issuance of TBs was suspended from 1983 to 1985. Since 1987, the Government has been increasingly relying on the sale of Treasury bills to absorb excess liquidity in the financial market. At the end of 1991, the balance of Treasury bills in the market amounted to W 2.2 trillion, compared with the outstanding balance of the MSBs at the end of 1991 of W 13.4 trillion. Similar to MSBs (see below), TBs are allocated by the Government to the financial institutions. Since the GOK has followed a very prudent fiscal policy there has not been a need to issue a large amount of the T-bills. As a result, there is no real benchmark of interest rate in Korea except perhaps the interest rate on commercial paper (para 3.10). Because of the lack of availability of T- bills in size and maturity neither the primary or secondary market for government securities has developed. There is a need to create such a market and benchmark for interest rates if the indirect monetary control procedures are to be adopted. In the future, the GOK may consider issuing the T-Bills

for its refinancing purpose or for specific new public sector investments on market based interest rate through competitive auction.

Monetary Stabilization Bonds

3.17 Monetary Stabilization Bonds (MSBs) which provide BOK with a principal open market instrument, when there is a shortage of other eligible paper such as T-bills or longer-term government bonds, are the liabilities of BOK. The BOK issues MSBs to banks, securities companies, investment and finance companies, investment trusts and life insurance companies. The maturity period of MSBs varies between 14 days and 546 days. Though MSBs have been in existence for many years, their use has been activated by the BOK since 1986 in order to absorb the increasing excess liquidity in the financial market that initially originated in 1986-89 from the large surplus in the balance of payments. The outstanding amount of MSBs in 1985 was barely W 504.1 billion; it shot up to W 17,305 billion in 1989 when Korea experienced a large current account surplus. The outstanding volume declined in 1990 due to a current account deficit and the preference of the BOK to use government bonds to absorb liquidity (Chapter IV). However, the use of MSBs increased in 1991 with the need to absorb excess liquidity to control inflation. Its importance as paper used in open market operations is revealed in the high ratio of MSBs outstanding to total bonds--MSBs, T-bills and foreign exchange stabilization bonds which are employed in conducting open market operations. More details of MSBs are given in Section C of Chapter IV.

B. Growth Indicators of the Money Market

3.18 A measure which relates the value of a money market instrument to narrowly defined money (M1), regarded as a close substitute for money market instruments, is used here as an indicator of the size, and importance of the money market instrument, and relative rates of change in the quantity of these instruments relative to the change in M1 as an indicator of the relative growth of those instruments. The indicators for the money market instruments are presented in Table 3.4. Between the end of December 1980 and end of December 1991, the nominal money supply (M1) increased by 276.4 percent. The value of transactions in the call money market increased by 544.8 percent during the same period, giving a growth elasticity of call transactions relative to M1 of 1.71. The value of commercial paper increased during the same period by 821.8 percent, giving a growth elasticity of commercial paper relative to M1 of 2.45. The value of repurchase agreem had a very high relative growth elasticity of 9.97 between December 1980 and December 1985, but since then has declined. MSBs of the BOK had a very high growth elasticity of 18.11 relative to M1 between December 1985 and December 1989, reflecting the activated public sale of MSBs to absorb increasing excess liquidity in the financial market. Thus, it is clear that money market in Korea has been growing in size and diversity in the last few years, paving the way for a bolder action to liberalize the interest rates which have long been constrained in a straightjacket of regulations.

Table 3.4: Korea - Growth Indicators of Money Market Instruments, 1980-89

Period	Call Money/M1	CP/M1	RPs/M1	CDs/M1	BAs/M1	TDs/M1	MSBs/M1
December 1980	0.0469	0.5472	0.0340	-	-	0.0394	-
December 1985 Elasticity to M1	0.0573 1.22	0.9786 1.79	0.3391 9.97	0.1430 -	- -	- -	0.0667 -
December 1987 Elasticity to M1	0.0485 0.85	0.9418 0.96	0.2692 0.79	0.1634 1.14	- -	0.0989 -	0.8088 12.13
December 1988 Elasticity to M1	0.0522 1.08	1.0175 1.08	0.1959 0.73	0.1442 0.88	- -	0.0930 0.94	1.2652 1.56
December 1980-89 Growth rate of money market instrument (%) Elasticity to M1	544.8 1.71	821.8 2.45	1,357.1 4.41	70.9 /a 0.90 /a	- -	1,182.5 3.41	3,332.9 /a 10.11

/a December 1985-December 1989 for Negotiable CDs and MSBs.

Source: Moon-Suo Kang, Money Markets and Monetary Policy in Korea, 1990, Korea Development Institute.

C. Level and Structure of Interest Rates

3.19 The level and structure of interest rates prevailing in the Korean money market are given in Table 3.5. As shown therein, the inter-bank market and the yields on certificates of deposits are as prevailed at end-June 1992. Despite the differences in time, one thing that emerges from the table is that the rates in the money market proper--that is, the inter-bank market and CD market--are higher than those on bank deposits and loans of identical maturities, suggesting that money market rates are more reflective of the market forces of demand and supply. Furthermore, there is some empirical evidence that money market interest rates and curb rates show a considerable integration in that the various interest rates in the market move in tandem, either in upward or downward directions. However, despite the rapid development of the money market in Korea in recent years, it is not as efficient as it should be, mainly because the financial intermediaries (especially the deposit money banks) are subject to rigid interest rate controls, while the NBFIs are subject to informal "window guidance" from the BOK or MOF. The efficiency of the market should improve materially if the Government reduces its intervention in the market and accelerates interest rate deregulation.

Table 3.5: Korea - Structure of Monetary Market Interest Rates, 1990-92
(Percent per Annum)

Year	BOK	Commercial Banks		Other Financial Institutions							
	Discount Rate	Deposit Rate	Lending Rate	Call Rates				CD Yields		MIBs	Yield on MFBs
				Overnight	Inter-bank Transactions	Transactions between Non-banks	2-15 day average	91 day	180 day		
1990	7.0	10.0	10.0								
1991	7.0	10.0	10.0	16.84	16.34	17.18	17.44	18.38	18.46	17.60	18.16
1992	7.0	10.0	10.0	14.85	14.81	14.87	14.87	17.31	17.52	16.46	18.32

Note: Data for 1992 as of end-June.

Source: BOK, Monthly Bulletin; IMF, International Financial Statistics, various issues.

D. Monetary Policy Instruments and the Money Market

3.20 As mentioned earlier, a well developed money market is a precondition for implementing indirect monetary controls. Trough an active money the monetary authorities can influence the level and structure of market interest rates. In Korea, until 1988, as observed in Chapter IV, the indirect monetary policy control of interest rates through open market operations similar to that in the USA has been minimal. This was because the BOK as well as the MOF were setting, through regulations and rules, maximum interest rates on each type of deposit and loan of banks, and controlling the volume of bank credit through moral suasion and/or other means. Even after the ceilings on interest rates were relaxed or removed in 1988, informal window guidance has been achieving the same results as the formal regulations as far as the levels of market interest rates are concerned. The BOK uses rediscount policy to influence money market rates; however, the manner in which this policy is conducted prohibits indirect monetary control from functioning the way it would traditionally work in a well-developed money markets, as rediscounts used to regulate liquidity in the financial markets and to control banks' reserve positions are very small. Reserve requirements (RRs) have been the other instrument often used in Korea as an indirect monetary policy instrument, but this instrument is not used as frequently because the BOK is reluctant to disturb the portfolio of the banking system. Open market operations of a traditional type under which government paper of different maturities is bought and sold at varying prices has not been adopted in Korea due to the lack of market based government securities in volume and maturities.

3.21 Korea has a reasonably well functioning money market. However, the Government would need to further develop money market in order to move from direct monetary controls to indirect monetary controls of the financial system. This will require full liberalization of interest rates and introduction of risk free market based instruments. These could achieve through auctioning of new T-bills or refinancing of the MSBs using market based interest rates as they become due. Associated infrastructures such as the creation of a network of broker/dealer, further development of credit rating agencies (Chapter VIII), and creation of on-line information on government securities to market participants for effective functioning of the secondary market, would need to be built in order to further increase the depth of the money market and foster its development.

E. Summary and Recommendations

3.22 The foregoing discussion of money market organization and development shows that the money market in Korea has grown in size and diversity in the last few years. However, the development of money market has been constrained due essentially to interest rate controls and lack of market based government securities which could be used as benchmark for pricing money market instruments. Although many instruments like CDs, CP and MSBs are traded in the secondary market, the rates are influenced through informal window guidance. Of all the individual segments of the money market, the commercial paper and inter-bank markets have been the

most competitive segments and have functioned with a minimum of restrictions.

3.23 Currently in the primary market, the most liquid of money market instruments are MSBs. However, their sale in the primary market has been managed by the BOK and the interest rates are set substantially below market rates. The MSBs are allocated to the NBFIs by the BOK, and as issued now, are essentially an instrument to tax the financial sector (especially NBFIs) in order to finance the quasi-deficit of the BOK caused by the subsidized policy loans. In order to be an efficient instrument for conducting open market operations, the size of the issue has to be large and the maturities should vary in order to enable construction of a yield curve. MSBs meet this criteria. Therefore, it is recommended the GOK consider advancing the lifting of control on MSBs from 1997 to 1993. The Government can easily achieved this through issuance of MSBs which will fall due during 1993. The Government should also consider issuing treasury bills and treasury notes at market rates in amounts and maturities on a regular basis. The T-bill rate as a reliable market indicator may then emerge. Auctioning of such securities will be the most efficient way to achieve this. Effective auctioning will require a network of accredited dealers/brokers. A large number of them already exist and will need to be accredited.

3.24 The BOK and the MOF should abstain from intervention in the money market, directed toward management of sale of money market instruments and the interest rates thereon. All papers, be they CPs, CDs, or BAs, should be allowed to be issued by market participants at market determined interest rates.

3.25 The Government should also encourage the development of pricing the money market instruments based on the credit risks of the issues. In this connection, the credit rating agencies should be developed further, as discussed in Chapter VIII.

3.26 The MOF, BOK, KSE, KFCI, and the association of money market dealers should work together in developing an information system on the secondary market of money market instruments to enhance the efficiency of the market.

IV. MONETARY POLICY IN KOREA

Introduction

4.1 In Korea, the financial sector has been used by the Government as a tool to implement its industrial policy. Monetary policy, its instruments, and their effectiveness will have to be considered in this overall context. This chapter starts by providing a brief historical perspective on the role of the BOK since the 1950s. This is followed by a description of monetary policy in the recent past and the available policy instruments. The effectiveness of each monetary instrument is then assessed. The rationale for moving to an indirect monetary control system is discussed and the preconditions for moving to such a system are presented by drawing on international experience with indirect monetary controls.

A. Historical Perspective

4.2 The Bank of Korea Act and the Banking Act were passed in June 1950, just before the outbreak of the Korean War. The BOK Act at that time gave the central bank full independence in conducting monetary policy similar to that of the Federal Reserve Bank in the USA. Commercial banks were all under government control until the late 1950s when they were privatized. In 1962, the BOK Act was materially amended to enable the MOF to more directly influence monetary policy through the Monetary Board, which is chaired by the Minister of Finance. As a result, the BOK does not enjoy the same level of independence as it did prior to 1962 in conducting monetary policy. At the same time, commercial banks were renationalized and the voting rights of private shareholders were limited to only 10 percent. The Government controlled the appointment of the executives of the banks and approved their operating budgets. Along with the specialized banks and commercial banks, the BOK also became an active provider of policy loans to the priority sectors (small-scale industries, exports, agriculture) which were rediscounted by the banking system. Monetary policy is essentially managed by both the BOK and the MOF though the influence of the latter is more pronounced.

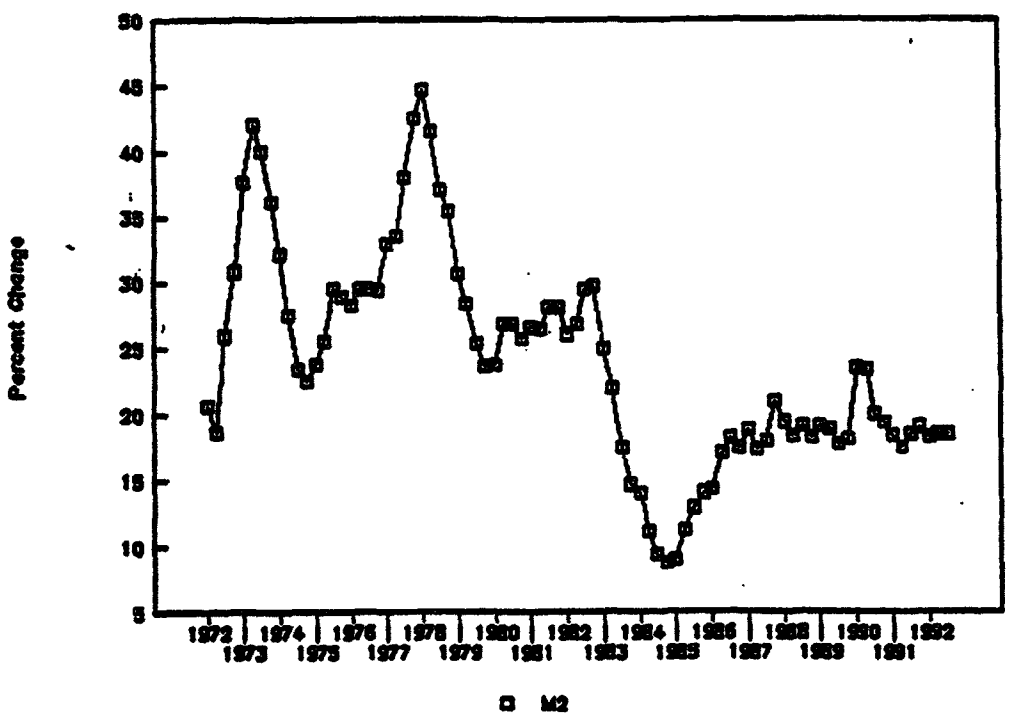
B. Current Monetary Policy and Procedures

4.3 In recent years, monetary policy in Korea has been conducted with the dual goals of maintaining economic growth and stability. The dilemma has been that even though both goals are theoretically compatible, there are conflicts in practice. The monetary authorities, however, have been trying to maintain a balance between these two goals by switching targets. Price stability was the primary objective of monetary policy from 1984 to 1985, 1988-1989, and since 1991, while economic growth was the overriding objective during 1990 and mid-1991.

4.4 The BOK has used M2--broadly defined money, the sum of currency held by the public and total deposits of banking institutions--as its intermediate target since 1979. The annual target increase for M2 is set in close collaboration with the Government in order to be consistent with

the Government's major macroeconomic objectives for the year, such as desired growth rates for GNP, inflation, and the balance of payments. Given the target for the annual increase in M2 with adjustment for the income velocity change, the BOK staff establishes quarterly and monthly operating plans that take into consideration seasonal fluctuations in demands for currency, Treasury expenditures and revenue collections, and expectations for foreign trade and capital movements. These short-term targets are reviewed continually through the year to allow for deviations of actual M2 changes from the targets and other unexpected developments. Within each quarter, furthermore, short-run deviations of M2 from the target are permitted for the sake of moderating short-run fluctuations in interest rates. The BOK announces the outstanding volume of M2 of the previous month at the beginning of the current month, but focuses on the volume of the last month of each quarter since it is the M2 growth rates of those months which the BOK wants to keep close to the target levels. In the early days of M2 targeting, the BOK found that trying to hold precisely to monthly targets generated more short-term fluctuations in interest rates than seemed desirable. The monetary base (or the reserve money) is an operating target in the monetary control policy of the BOK. The desired level of monetary base is derived from the money multiplier equation with the given target level of M2. The BOK calculates the desired monetary base, taking into account the change in the M2 multiplier and the other exogenous factors such as policy loans, and seasonal influences on currency demand, etc.[1/] Changes in M2 since 1972 are shown in Chart 4.1.

Chart 4.1: Korea - Annual Growth Rates of M2, 1972-92
(Percent)



Source: Bank of Korea.

1/ Se-Jin Kim, "A Study on Indirect Monetary Control in Korea," (Mimeograph), Korea Institute of Finance, 1992.

4.5 Immediately after the adoption of M2 targeting, there was a slow but steady rise in the year-to-year growth of quarterly-average M2 from the end of 1979 through 1981. After a short period of rising growth from the end of 1984 to mid-1986, year-to-year growth rates leveled off and have been remarkably stable since then through the third quarter of 1992.

4.6 Recently, the choice of M2 as an intermediate target has been in question as the financial products not included in M2 have been growing very fast and the share of M2 in M3 has been falling. Financial markets in Korea have undergone dramatic changes through the 1980s. First of all, the growth of NBFIs during this period has been prominent and new financial products from the NBFIs, like the Cash Management Account, have been able to grow rapidly due to a high return on them and liquidity. Also, the CD and trust accounts of banks grew fast in the late 1980s. None of these financial products are included in M2. In fact, the control on M2 promoted the growth of these new financial products since monetary control has been primarily focused on M2, leaving the NBFIs relatively less restricted. Using M2 as the intermediate target, monetary control has been confined to deposits at banks which impacted heavily on banks' asset/liability management. M2 thus does not adequately reflect liquidity in financial markets and the relation of M2 to macro variables such as GNP growth, employment, inflation, etc. has tended to become more unstable than before. It is for this reason that the monetary authorities ought to modify the current intermediate target to include the highly liquid financial instruments of the NBFIs.

C. Existing Monetary Policy Instruments and their Characteristics

4.7 The BOK has been using both direct and indirect controls to target monetary aggregates. Until the 1970s, the BOK relied mainly on reserve requirements (RRs) and direct measures to control monetary aggregates and domestic credit. In 1982, indirect control procedures, which usually depended on discount window, open market operations, and RRs, were officially adopted to replace direct control. In actual operation, however, the BOK has limited options in applying indirect control instruments. Now and then, the BOK has turned to direct control measures, like window guidance and moral suasion, in seeking to meet M2 targets. These instruments are discussed in detail below.

4.8 Rediscount policy. The BOK lends to banking institutions by rediscounting commercial bills or by making loans on the collateral of particular bank assets. These loans and discounts serve two major purposes: first, to accommodate conventional liquidity management operations of the banks like any other central bank. In the BOK, however, these loans (called Type B loans) account for less than 5 percent of total loans and discounts[2/]. By far the most important use of discount lending by the BOK is to channel credit at below-market rates into particular industries selected for reasons of industrial policy. These include loans for export financing, agriculture and fisheries, and Type A general loans to banks that have participated in such selective financing as loans for

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2/ Se-Jin Kim, 1992, op. cit., p. 6.

small- and medium-sized enterprises, loans for energy saving equipment and others (the so-called policy loans). Even the current rediscounts on commercial bills are limited to bills issued only by small- and medium-sized industries. Therefore, 95 percent of BOK's loans and discounts can be considered policy loans.

4.9 In Korea, there is a chronic excess demand for bank credit and so banks depend heavily on borrowing from the BOK. This should not be surprising, given a BOK discount rate of 7-8 percent and bank lending rates well below market rates (partly because of window guidance from the BOK or the MOF). Under these conditions, the BOK cannot use changes in discount rates to control the volume of discount loans flowing into the monetary base. At most, it can exert a minor influence on the volume of discount lending by changing the proportion of eligible loans for rediscounting. Rediscounting at the BOK is essentially an entitlement program in which bank loans that meet certain requirements of industrial policy will be discounted. The volume of discount lending is thus not under the control of the BOK. During 1990 to 1991, the increase in rediscounts accounted for 66.1 percent of the increase in the monetary base (Table 4.1). This means that the other two main instruments--RRs and open market operations--needed to carry virtually the full weight of controlling the monetary base and the money supply.

Table 4.1: Korea - Loans and Discounts Outstanding /a of the Bank of Korea, 1985-91
(Billions of Won)

	1985	1986	1987	1988	1989	1990	1991
Rediscounts on commercial bills	1,320.8	1,291.9	1,620.1	1,862.1	2,588.0	3,819.6	5,478.7
General Loans	5,463.2	6,115.7	7,144.0	6,416.7	5,920.6	5,968.4	6,092.7
Loans for foreign trade	2,039.2	1,927.2	1,132.8	526.7	639.2	891.9	986.2
Loans for agriculture, fisheries and livestock	173.6	199.0	260.8	314.4	567.0	348.2	413.8
Loans for procurement of fertilizer	570.0	570.0	570.0	570.0	570.0	570.0	570.0
Others	71.4	53.3	55.5	35.4	5.7	6.8	9.9
Total (A)	9,641.0	10,157.2	10,783.3	9,725.2	10,290.5	11,604.8	13,551.3
Reserve Money (B)	4,319.0	5,016.7	7,469.2	9,728.4	12,818.6	13,811.2	16,321.7
A/B (%)	223.2	202.5	144.4	100.0	80.3	84.0	83.0

/a Excludes loans to the Government.

Source: Bank of Korea, Monthly Bulletin, various issues.

4.10 Reserve Requirement Policy. The BOK imposes RRs on the deposit liabilities of banking institutions. These requirements are applied to all similar deposits at all banks, with the reserve ratio not exceeding 50

percent. Since June 1981, the BOK has applied the same reserve requirement (RR) ratio to both demand deposits and time and savings deposits in order to prevent a shift of funds between deposits with different RRs resulting in the instability of the money multiplier. The current required reserve ratio is 11.5 percent, except for a few long-term time and savings deposits and deposits for non-residents to which lower ratios are applied.

4.11 Since a change in RR ratios has an impact on the portfolio of the banking institutions and the liquidity of financial markets, a central bank is reluctant to make frequent use of the RR policy to control the money supply. The BOK, however, raised RR ratios on a number of occasions to control the excess liquidity supplied by the foreign sector after the current account moved into surplus, as in the late-1980s.

4.12 The BOK is also authorized to impose marginal RRs of up to 100 percent on any increase in deposits. In April 1989, the BOK imposed marginal RRs to cope with the rapid growth in the demand for money from the private sector. This was lifted in February 1990 when overall RR ratios were raised.

4.13 Also subject to RRs are deposits at non-bank financial institutions (NBFIs), which hold reserves in the form of interest-bearing assets like bank deposits, MSBs, and government securities. This is in contrast to the reserves at banking institutions which do not yield interest. Because of this, NBFIs have been able to pay relatively higher interest on their deposits, making them more competitive than banks, which have also been burdened with more severe interest rate regulations. In response to this problem, the monetary authorities raised the limit of CD issuance for banks and reduced restrictions on the portfolio of banks' trust accounts. Banks hold reserves for both the CD and the trust accounts in the form of interest-bearing assets. As the deposits of non-banks' and banks' CD and trust accounts increased rapidly in the later 1980s, the share of deposits subject to regular RRs decreased from 70 percent in 1985 to 38 percent in 1991, which severely weakened the RR instrument.

Open Market Operations

4.14 There has not been any open market operations in a traditional sense. What passes off as open market operations is an allocation of MSBs or government securities or securities fully guaranteed by the Government to the financial institutions, particularly NBFIs, to absorb liquidity when needed. The use of government securities or MSBs has been made since the mid-1980s, when the surpluses in the balance of payments created large liquidity in the financial system. When the balance of payments shifted into deficit in 1990, the BOK could not rely simply on MSBs, and increasingly turned to government securities to regulate liquidity. Paper other than MSBs (like foreign exchange stabilization bonds) has also been used for this purposes since 1987 (Table 4.2).

Table 4.2: Korea - Outstanding Government Securities, 1985-92
(Billions of Won, End of Period)

	T-Bills	For. Exchange Stabilization Bonds	MSBs	Total
85	0.0 (0.0)	0.0 (0.0)	304.1 (100.0)	304.1 (100.0)
87	1,000.0 (9.4)	1,500.0 (14.1)	8,174.5 (76.6)	10,674.5 (100.0)
89	2,500.0 (11.8)	1,400.0 (6.6)	17,305.4 (81.6)	21,205.4 (100.0)
90	2,500.0 (12.1)	3,000.0 (14.5)	15,240.5 (73.6)	20,740.5 (100.0)
91	2,207.2 (10.9)	4,483.3 (22.2)	13,496.5 (66.9)	20,187.0 (100.0)
92 /a	1,874.6 (8.4)	4,483.3 (20.1)	15,951.2 (71.5)	22,309.1 (100.0)

/a June 1992.

Note: Figures in parentheses are percentages of total.

Source: Bank of Korea.

4.15 The BOK has issued and repurchased MSBs in a captive market. Most sales of MSBs have been conducted by direct sale or acceptance. Auctioning to the general public was very limited both in size and frequency. In direct sale and acceptance, the operations desk unilaterally determines the issuing rate and the size of a transaction and allocates the MSBs among NBFIs, including bank trusts. The rapid expansion of MSB issuance and the assignment of these bonds to financial institutions severely restricted their asset management and caused distortions in the financial markets. Besides, a sale of MSBs has involved heavy losses for the BOK and in consequence led to a rise in the monetary base.

4.16 The issuing rates of MSBs were linked to the interest rates on time deposits with comparable maturities. But secondary market rates of MSBs were two to five hundred basis points higher than the issuing rates (Table 4.3). These spreads reflected the costs to NBFIs which purchased MSBs from the BOK. In addition, the large volume of MSB issuance has crowded out the underwriting capacities of the designated dealers among NBFIs and has caused upward pressure on market interest rates.

Table 4.3: Korea - MSB Issue Rate and Secondary Market Rate, 1989-92
(Percent)

	1989	1990				1991				1992		
	12	3	6	9	12	3	6	9	12	3	6	9
Issue Rate (A)	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
Secondary Market Rate (B)	15.2	14.4	15.9	15.6	16.5	16.2	18.0	18.5	18.1	16.4	16.3	16.4
(B-A)	2.2	1.4	2.9	2.6	3.5	3.2	5.0	5.5	5.1	3.4	3.3	3.4

Note: Quarterly average.

Source: Bank of Korea.

4.17 Since 1989, the BOK has made greater use of repurchase agreements (RPs) for controlling short-term liquidity in banking institutions. After considering changes in the credit condition of financial markets, the money supply, and the reserves of banks, the BOK's operations desk determines the timing and size of repurchase agreements. As in the case of outright sales and purchases, the BOK sets the terms of RPs and assigns the RPs to banks at the BOK's discretion. The large volume of RPs in 1990 and 1991 was partly due to a shortfall in banks' required reserves (Table 4.4). However, unexpected assignments of the RPs at the BOK's discretion have severely restricted the asset management of banks.

Table 4.4: Korea - Open Market Transactions under Repurchase Agreements, 1989-91
(Billions of Won)

	1989	1990	1991
Purchases	5,901.7 (11)	118,930.9 (90)	36,641.9 (11)
Sales	11,943.7 (22)	8,300.0 (8)	53,929.5 (59)

Note: Figures in parentheses presents the number of operations.

Source: Bank of Korea.

4.18 The BOK cannot conduct open market operations analogous to those of the Federal Reserve System or the Bank of England because Korea's money and bond markets lack the necessary depth, breadth, and resilience, and Korea does not have a large enough stock of outstanding government debt for trading. The fiscal reforms resulted in Korea being one of the very few countries in the world with an essentially balanced budget. However, the changes contemplated in Korea about deregulation of interest rates may help obviate these restrictive conditions. Furthermore, by auctioning

MSBs, the BOK will create a benchmark of interest rates which will facilitate pricing of other financial instruments.

Impact of Monetary Policy Instruments on M2

4.19 Table 4.5 shows the changes in M2 during the period 1979-1991, both on account of changes in the monetary base (MB) and the money multiplier (MM). The MM has been large and variations therein are also large, sometimes in the same direction as the changes in MB and sometimes in the opposite direction. This means that for the monetary policy instruments to achieve their effectiveness in terms of maintaining a target of M2 within the desired range, they should be capable of controlling the value of MM as much as the amount of MB. However, of the three instruments, only reserve requirements can control to some extent the value of MM along with the MB. The other two--rediscount policy and open market operations--have little power to influence the behavior of the MM. The discount rate, as observed earlier, is not varied as much, and it is often below the market rates of interest. As such, it has little effect on the market rates. The sale and purchase of central bank or government securities too have no reach beyond the banks' interest rates (which too are limited in view of regulated interest rates) to the interest rates in the unregulated financial markets--NBFIs, foreign banks, and the foreign exchange market, etc. Even the RRs can influence the multiplier only to the extent it raises or lowers the ratio for bank reserves to bank deposits. But MM also fluctuates due to changes in the ratio of currency to M2 and the ratio of excess reserves to bank deposits. The changes in the latter ratio could be ignored because of a very small margin of excess reserves in Korea, but not the changes in the ratio of currency to M2, which are large as a result of changes in the market interest rates representing the opportunity cost of holding currency. This deficiency in the policy instruments could be alleviated if a greater use of indirect monetary policy instruments, particularly open market operations, is made more frequently, more flexibly, and on a larger scale, as that instrument has greater power to influence the opportunity cost of holding currency by targeting monetary base as well as interest rates as the intermediate target, and by shifting the emphasis between the two as the monetary circumstances warrant.

Table 4.5: Korea - Annual Growth in M2, Monetary Base & M2 Multiplier, 1979-91
(Annual Averages, Billions of Won)

Year	Monetary Base (MB)	Percent Change	Multi-plier (MM)	Percent Change	M2	Percent Change
1979	2,900	26.03%	2.95	0.68%	8,556	26.81%
1980	2,712	-6.48%	3.97	34.53%	10,764	25.81%
1981	2,744	1.18%	5.00	25.93%	13,715	27.42%
1982	2,841	3.53%	6.19	23.77%	17,575	28.14%
1983	3,432	20.80%	6.12	-1.06%	21,005	19.52%
1984	3,625	5.62%	6.42	4.84%	23,261	10.74%
1985	3,736	3.06%	6.96	8.52%	26,015	11.84%
1986	4,078	9.15%	7.45	7.04%	30,396	16.84%
1987	4,861	19.20%	7.43	-0.31%	36,120	18.83%
1988	6,856	41.04%	6.26	-15.80%	42,893	18.75%
1989	9,386	36.90%	5.41	-13.50%	50,793	18.42%
1990	11,707	24.73%	5 26	-2.81%	61,576	21.23%
1991	13,743	17.39%	5.31	1.02%	73,024	18.59%

Note: Percentage changes in MM and MS do not add up to the percentage change in M2 because of the difference in the Multiplicative terms. For this, a corrective term given by the ratio of MM of the previous period to the MM of the current period is to be used to multiply the percent change in MB. In equations, this will be: PercentΔM2 = percentΔMM_t + percentΔMB_t x MM_t/MM_{t-1}

Source: Bank of Korea.

4.20 Apart from this, there are other reasons to switch to the indirect monetary control procedures. The effectiveness of direct controls was eroded by three major developments in the 1980s. First, both financial institutions and financial markets developed ways to avoid direct control. Most financial institutions, including the DMBs, have expanded their trust operations and established NBFIs. Second, the burden of direct control made banks less competitive vis-a-vis NBFIs to which they lost market share. Third, the financial markets grew substantially and became so complicated that the monetary authorities could no longer exercise direct control effectively. With the opening of Korean financial markets to foreign countries, the monetary authorities need to enhance the efficiency of Korean financial markets, which indirect monetary control, non-discriminating in its impact, is better suited to do. Furthermore,

with current account transactions being largely liberalized, international transfers of capital funds have taken off and will accelerate in the near future, thereby spawning greater fluctuations in money supply, which are less amenable to direct monetary controls. Finally, the Korean exchange rate system has changed from the fixed exchange rate system to a market average exchange rate system, under which the won/dollar rate changes daily within a permissible range. In the future, the exchange rate will be determined more by market forces in the foreign exchange market. Under indirect monetary control, the monetary authorities can influence exchange rates effectively by changing domestic interest rates.

D. International Experience

4.21 Introduction. The issues relating to the procedures applied to implement monetary policies in semi-developed and developing countries such as Korea, Indonesia, Malaysia, Sri Lanka in Asia; Chile, Argentina, Uruguay and Mexico in Latin America; and Turkey in Europe have come to the fore in recent years as many of these countries, through financial liberalization policies, have opened up their financial systems to market forces. In the past, most of these countries had highly regulated financial systems, and in such a financial and economic environment, monetary control was exercised in a direct fashion.[3/] The central characteristic of these procedures was the regulation both of the price and quantity of credit. Interest rates were controlled through directions from the central bank or the Government since the distinction between them was almost nonexistent. Credits with preferential interest rates were treated as part of interest rate policies. Recourse to central bank credit was not only common but almost automatic in many cases, sometimes constituting the bulk of the banking system's liabilities. Other arms of the direct methods of controls have been represented by RRs and the liquid assets ratios; a common thread joining them was the provision of finance to the Government. In addition, there have been quantitative ceilings on loans provided by banks such that they were directed into sectors which the authorities considered as priority sectors or the productive sectors. Monetary control has been a particular manifestation of the wider dirigist policies in the monetary and financial spheres, though it afforded some scope for market forces, albeit modestly, unlike the experience in the centrally planned economies where credit allocation between government and the production sectors and among the production sectors themselves has been predetermined by central direction.[4/]

3/ See Y.J. Cho and Deena Khatkhate, "Lessons of Financial Liberalization in Asia: A Comparative Study," World Bank Discussion Paper 50, World Bank, Washington, D.C., 1989; Fry, Maxwell, Money, Interest and Banking in Economic Development, The Johns Hopkins University Press, Baltimore, 1988; McKinnon, R., "The Order of Economic Liberalization," Johns Hopkins University Press, Baltimore, 1991.

4/ McKinnon, R. op. cit.

4.22 The direct procedures of monetary regulation, while serving the needs of the economies for some time, led gradually to the consequence which neither ensured efficient allocation of credit nor price stability--the central objectives of any economic policies directed at rapid growth of output and welfare. Regulated interest rates and credit ceilings often make it difficult for banks to maximize their profits, thereby motivating them to resort to widespread evasion. Ways are found to divert credit to low priority sectors; credit ceilings often lead to excessive undesired liquidity which then discourages banks to refrain from deposit-taking. The preferential credits mean ipso facto central bank credit as most of the primary lenders rediscount those credits with the central banks. The liquid assets ratio provides governments with low cost finance, which encourages them to rely more on this source to finance their expenditure than on taxes or borrowing from non-bank sources. Eventually, all this leads to financial disintermediation, as it did in most of the aforementioned countries in Latin America and Asia, and other countries like India, Bangladesh, Kenya, Turkey, Ghana, etc.[5/] that adopted direct monetary control procedures.

4.23 In order to obviate these adverse repercussions on the financial system and through them on the real economy, a large number of developing countries, and several of the centrally planned economies (in addition to countries already referred to above, other important countries which are reforming their financial systems are India, Pakistan, Poland, Hungary, etc.) have initiated financial reforms. Once the financial systems are unshackled, competitive forces are let in to determine the cost and quantity of credit, and where this does not occur, the intervention that becomes necessary is confined to a limited area of economic activities. The emphasis, therefore, is placed on indirect monetary control procedures under which interest rates reflect the riskiness of borrowers and the maturities of instruments as recently experienced in Indonesia, Chile, Turkey, Thailand, Malaysia, and Mexico.

4.24 This section aims at capturing the main elements of indirect monetary control procedures, both in selected advanced countries and in those developing countries where financial reforms have substantially progressed. The experience of the former group of countries will throw light on how the indirect methods of monetary control operate in different industrial countries, and in what way they can be adapted to countries like Korea which are moving in that direction. Though their experiences are not uniform in pattern, there is an underlying unity in the basic structure--that is to say that the market signals are given primary importance in the determination of cost and allocation of credit. The experiences of the selected developing countries have relevance insofar as they would indicate how newly liberalizing systems formulate indirect monetary control procedures when financial markets are not yet fully developed and competitive, and what kind of impediments the countries face

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5/ International Monetary Fund, "Interest Rate Policies in Developing Countries," Occasional Paper No. 27, 1983; Khatkhate, Deena, "Assessing the Impact of Interest Rates in Less Developed Countries," World Development, May 1988; Leite, S.P. and V. Sundararayan, "Issues in Interest Rate Management and Liberalization," Mimeograph, IMF, 1988.

in implementing them, without having to wait for the financial environment to approximate the situation in industrial countries.

Indirect Monetary Controls in Selected Industrial Countries

4.25 Monetary policy procedures basically refer to a mechanism by which the central bank influences the short-term interest rate and bank reserves. For many years until the mid-1970s, the central banks in the industrial countries like the US, UK, France and Japan relied on a mix of direct and indirect methods for this purpose. In recent years, the emphasis has shifted in a pronounced manner to indirect methods, imparting greater flexibility to the implementation of monetary policy. The basic idea underlying the indirect monetary control procedures has been that the central bank can influence short-term interest rates in the inter-bank market, given the demand for central bank liabilities in the form of bank notes and reserve deposits held by banks whether for clearing purposes or for meeting RRs, by utilizing the supply of reserves over which it has almost total control. The central bank's ability to influence short-term interest rates under indirect monetary control procedures, depends on how it can induce banks to seek central bank accommodation at the margin. A precondition for the effective control by the central bank over bank reserves is the pressure exerted on banks by changes in other items in the central bank balance sheets so that they are left no other alternative than to be dependent on central bank accommodation.[6/]

4.26 Accommodation by central banks is effected basically in three ways, though there are variations within each, depending upon the practices and traditions in a particular country. They are: a central bank can supply reserves to banks through facilities for the rediscounting of commercial bills at posted interest rates or changing the rediscount quotas, the conduct of open market operations, and variations in the RRs of traditional type. The last one has been in force in the industrial countries, even when direct methods were employed. In fact, there has been a debate about whether the RRs should be categorized as an indirect instrument of monetary control. When RRs are used in the context of indirect monetary control procedures, their level is generally seen to be lower than before, and only for meeting clearing requirements. In the main, they are used not to change the supply of reserves to banks so much as to change the banks' demand for them in a manner that reserve movements become conducive to the achievement of money market objectives. Thus the RRs have become a fulcrum of monetary policy. In order to smooth the observance of the reserve requirement system, the selected countries--US,

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6/ See for a comprehensive discussion, Bank for International Settlements, Changes in Money-Market Instruments and Procedures: Objectives and Implications, March 1986, and Changes in Central Bank Money Market Operating Procedures in the 1980s, BIS, Economic Paper No. 23, 1989; Bank of England, "Management of Liquidity," Bank of England Quarterly Bulletin, September 1982; Quintyn Marc, From Direct to Indirect Monetary Policy Instruments: The French Experience Reconsidered, IMF Working Paper WP/91/73, 1991.

UK, France and Japan--have adopted a lagged or semi-lagged system where RRs are fully or partly on the level of the reserve base (usually bank deposits) in a previous period. This gives a considerable flexibility in reserve management to banks. Table 4.6 presents the main characteristics of instruments used in indirect control procedures in four selected industrial countries.

Table 4.6: Summary Characteristics of Monetary Policy Instruments in Industrial Countries

	U.S.	U.K.	France	Japan
Central Bank Credit Facilities				
Ordinary discount facility available	x			x
Loan or advance fcciility available	x	x	x	x
Access subject to quotas or ceilings	x			x
Penalty for frequent recourse				x
Key official rate above market rates		x	x	
Official rate set in relation to treasury bill rate				
Market Operations				
Outright market transactions				
Purchases of government securities	x	x		x
Sales of government securities	x	x		
Purchases of treasury bills	x	x	x	
Sales of treasury bills	x	x	x	x
Purchases of private bills		x		x
Sales of private bills				x
Sales of bills issued by the central bank				x
Reversed transactions	x	x	x	x
Purchase and resale operations in government securities	x		x	
Sale and repurchase operations in government securities		x	x	
Purchase and resale operations in private bills			x	
Sale and repurchase operations in private bills		x		
Foreign currency operations				
Transfer of government deposits				
Reserve Requirements				
Cash reserve requirements in force	x	x	x	x
Averaging provisions for reserve holding	x		x	x
Carry-over allowed for reserve surplus/deficits	x		x	
Contemporaneous (C), lagged (L) or semi-lagged (SL)	SL	L	SL	SL
Length of reserve holding period (in days)	14	180	30	30
Highest reserve ratio for demand deposits	12	0.5	5	2.5
Highest reserve ratio for term and saving deposits	3	0.5	1	1.75
Penalty for reserve deficiencies (% above discount rate)			3	3.75

Source: Bank for International Settlements, Changes in Central Bank Money-Market Operating Procedures in the 1980s, BIS Economic Paper No. 23, 1989.

Central Bank Credit Facilities

4.27 In the United States, a distinction is conveniently drawn between systems like that in the US in which the central bank makes extensive use of outright purchases of securities on the open market for supplying reserves to banks, and ones in which the liquidity not only of

individual banks but also of the banking system as a whole is more dependent on direct central bank lending. In the latter, money market rates have been seen to be more closely influenced by rates on credit provided by the central bank. Credit made available through discount is rationed by administrative constraints on the use by banks of the Federal Reserve discount window in a manner which permits the discount rate to be maintained below the day-to-day interbank rate (the federal funds rate) by a variable margin. However, the influence of the discount rate on money market rates has increased in recent years, unlike during the period prior to 1979, when open market operations were geared to keeping the federal funds rate within a narrow range. The adoption in 1979 of operating objectives for bank reserves changed this situation by permitting the banks' demand for reserves to influence market interest rates. The operating target has been the non-borrowed reserves which is derived by deducting the estimated level of borrowed reserves of banks from the forecast demand for total bank reserves. Since mid-1982, non-borrowed reserve objectives have been adjusted weekly, in light of deviations of required reserves from the projected level, so as to achieve the desired degree of monetary restraint or ease, but also with a view to permitting more stability in the short-run in bank borrowings at the Federal Reserve. In effect, the incentive for borrowing provided by the margin between the discount rate and the federal funds rate serves as a fulcrum for a policy which has brought about more stability in the federal funds rate. In the period following the stock market crash in 1987, the Federal Reserve supplied liquidity generously through open market operations, targeted at the norm of the federal funds rate. By early 1988, non-borrowed reserve operating procedures were again brought into reckoning to be used for encouraging a rise in the federal funds rate.

4.28 In the United Kingdom, the announcement by the Bank of England (BOE) of a minimum lending rate was terminated by the 1981 money market reforms. This change formed part of an effort to overcome a propensity to delay making changes to official posted rates by permitting market judgements--formed on the basis, among others, of developments in the money stock--to exert more influence on interest rates. At the same time, the authorities terminated the practice of deliberately creating reserve shortages by issuing treasury bills in excess of expected Treasury cash needs at the weekly auction and of relieving them subsequently--either by purchasing treasury bills at posted dealing rates or by lending to the discount market so as to make effective the chosen minimum lending rate of the authorities. They have continued to operate an interest based monetary control system. Earlier, they tried to confine these operations to very short-term market transactions in bills at interest rates quoted by the discount houses at the initiative of the BOE. But these arrangements were not successful in disengaging longer-term money market rates from direct official influences. It came to be recognized that in certain circumstances, the procedures which would permit a clearer official lead in the formation of interest rates were needed. Since 1985, the BOE invited the discount houses to borrow from it at a minimum lending rate posted in the morning for one day and on many occasions later in the day. Such lending is effected at an interest rate and for periods chosen by the authorities.

4.29 In France, new money market control procedures introduced by end 1986, have operated in a manner similar to those in other European

countries like Germany, Italy, Belgium, etc., but the institutional arrangements are different. Money market rates are guided by the rates applied in periodic acquisition by the Bank of France of paper by tender operations. A short-term "pension" (a type of reversed transaction in securities or bills) facility available at the initiative of the bank normally sets an upper limit to fluctuations in the day-to-day money market rate. A lower limit is set by short-term liquidity absorbing "pensions" operations conducted on an ad hoc basis again at the discretion of the Bank of France.

4.30 In Japan, the basic official discount rate lies well below the call money and bill rates in the interbank market. Central bank credit is rationed by credit lines established under the provision of the bank credit control system. Furthermore, decisions about the daily allocation to banks are made entirely at the discretion of the Bank of Japan (BOJ), which may also withdraw at any time credit granted previously, so as to impose "repayment pressure." The effective cost of using BOJ credit rises as the period of utilization falls. Thus, central bank lending has become a flexible and powerful instrument which is still used, in continuation with new market instruments, either to offset daily fluctuation in bank reserve positions or to tighten or ease these positions. This discretion exercised by the BOJ creates uncertainty among banks about how future reserve needs will be met. In recent years, the deregulation of the money market has allowed these rates to move somewhat more freely than in the past in response to changing pressures on reserve positions.

Open Market Operations

4.31 Open market operations as conducted by outright purchases and sales are still on a modest scale in Japan and France. They are well established in the US and UK. The main accent is on the development of new techniques and instruments such as purchase/repurchases agreements or reverse operations, directed at effecting temporary changes in a bank's reserve positions in the direction desired by the central banks.

4.32 The instruments used in these operations in the United States are either long-term government securities or treasury bills; no private paper is used and these procedures are the principal procedures adopted to provide or withdraw bank reserves. Transactions are handled "over the counter," with the bulk of the orders being placed with so-called "primary" dealers in treasury securities, some of which are specialized departments of money-center banks. Normally, dealers are required to tender for securities of a particular type and maturity. Allocations take place at the most favorable bid price until the desired amount is purchased or placed. The distinguishing characteristic of this operation is a sharp distinction drawn between debt management operations (conducted by the Treasury), and monetary policy operations consisting of net purchases in the secondary market (conducted by the Federal Reserve).

4.33 In the United Kingdom, the 1981 reforms were designed to make transactions in treasury bills by the Bank of England as the principal instrument for regulating the money market. Against a background of strong pressures on money market liquidity and a depletion of the supply

of treasury bills in the market which followed a persistent overfunding of the government's borrowing requirements, purchases of treasury bills becomes a main and continuing source of bank reserves. The Bank's effort to lengthen the short average maturity of its bill holdings so as to reduce the huge volume of purchases necessitated by redemption alone implied that the determination of term money rates could not be left to the market.

4.34 In France, outright purchases of private and public sector paper by the Bank of France from credit institution via discount houses under a tender procedure introduced in 1973 ("achats fermes sur appels d'offres") constituted in the course of time, the principal instrument for meeting banks' foreseeable liquidity needs, at least in periods when interest rates could be kept fairly stable. Since December 1986, these transactions have been replaced by similar "pension" (security repurchase) transactions. With participation essentially confined to credit institutions, these public tenders have never been regarded as true "open market" operations. However, the Bank of France reserves the right to undertake anonymous transactions in the secondary markets in bonds and other securities, and has since 1986 purchased and sold treasury bills on a limited scale.

4.35 For many years in Japan, the BOJ followed a policy of gradually increasing its holdings of securities, including ten-year government bonds, to meet the rising demand for central bank credit. These purchases are made from dealers as well as banks by means of a tender procedure which at first took four to five days to complete, but was subsequently simplified to permit day-to-day transactions. Tenders have become smaller in amount and more frequent, but the operations are still not normally used for short-term or seasonal reserve adjustments. For smoothing seasonal variations in reserves, the BOJ has followed a novel method, since the early 1970s, of buying and selling first class corporate bills and bills of financial institutions with corporate bills as collateral in the market.

Reserve Requirements

4.36 Reserve requirements, though not strictly an indirect monetary instrument, have been a part of monetary policy procedures since the 1980s. The difference between the use of RRs then and now is that their level has been considerably reduced in the countries, more or less to a level which can enable the banks to meet the needs of reserves for clearing purposes. Furthermore, RRs are resorted to, under indirect monetary control procedures, in order to influence the demand for bank reserves in ways intended to be conducive to the achievement of money market objectives.

4.37 The period of holding reserves and other technical details related to it have implications for the management of short-term money market rates. In the US, France and Japan, reserve holdings are semi-lagged, while in UK they are lagged. In fact, there is no contemporaneous accounting in any of the G-10 countries. These holding arrangements are considered to be good for facilitating interest rate-oriented money market

policies. The length of reserve holding is highest in the UK (180 days) and the lowest in the US (14 days; in France and Japan, the comparable period is 30 days. In two countries, France and Japan, the penalty rate for reserve deficiencies above the respective discount rates is 3 and 3.75 percentage points.

4.38 It can be seen from Table 4.6 that all four countries have gone a long way toward a market based approach to monetary control during the 1980s. While there are several common features of the procedures, there are some noticeable differences among the four countries. Market operations predominate in all the four countries, but outright market transactions are important relatively in three (Japan, the UK and US), while reversed transactions are prominent in France. Most of the open market transactions are in government securities and treasury bills; private bills are used for this purpose in Japan, France and the UK. Foreign currency operations prevail only in the UK. As regards RRs, the four countries are broadly similar but differ with respect to how the reserves are held.

The Market-Based Monetary Control Procedures in Selected Developing Countries

4.39 In this part, the use of market-related monetary policy instruments in six developing countries (Argentina, Brazil, Indonesia, Malaysia, Mexico, and Thailand) is discussed. These countries differ from each other in regard to their stage of development, macroeconomic balances, and degree of liberalization of economic policies. Argentina had severe macroeconomic imbalances in the early 1980s. It undertook financial liberalization which went through turbulence before regaining the momentum. Brazil has high inflation, a fiscal deficit and the financial system (though diversified in terms of instruments, institutions and financial sophistication) is still greatly controlled. Indonesia has been liberalized since 1983, and most of the sectors (trade, financial and industrial) are all allowed to operate free from much government control; it has a free capital account. Since 1973, interest rates have been determined by market forces; the financial system has become fairly competitive since 1983. Macroeconomic policies are well controlled with the fiscal deficit financed only by foreign loans. Malaysia has had an open system for many years and progressed further since the end of the 1980s. It also has a stable macroeconomic environment with a modest fiscal deficit and an almost open capital account. Mexico, after a serious economic and debt crisis in the early 1980s, has emerged as a stronger economy; the fiscal deficit has been converted into a surplus, and so have the external accounts. There is relative price stability (from 2,000 percent inflation down to 20 percent in 1992), and its external debt is now managed in a way that it will tend to be on a downward trajectory in the 1990s. Most of the interest rates are market determined, with new money market instruments being widely used in a competitive financial system. Thailand, of all these selected developing countries, had been more open with a competitive banking system. It had a high rate of growth and a manageable inflation rate.

4.40 The common feature of all these countries is that they all have either abolished or diluted the direct methods of credit control. Another

feature is that they operate a flexible exchange rate system, though the exchange rate is a managed one leaving some scope for independent monetary policy. As an indication of indirect monetary control, most of these countries have used monetary aggregates as intermediate targets, while on some occasions interest rates also have been used as such targets. Following financial reforms, Indonesia changed from targeting the domestic credit of the banking system to targeting money and broad money. In Malaysia, the focus shifted from interest rates to broader monetary aggregates. Argentina, Brazil, Malaysia and Mexico also have monetary aggregates as their intermediate targets (summarized in Table 4.7). Thailand uses reserve management as an operational target.

4.41 In all these countries, the main instruments used in money market operations are either treasury bills or central bank bills, which are all sold through auction. Generally, the auction is conducted by the central bank and is free from discretionary elements, although in countries like Mexico, a cut-off point in the auction prices is fixed, using (to the extent possible) judgement based on market conditions. The main purpose in using cut-off yields is to prevent wide swings in market interest rates. The types of instruments used for exercising monetary control are given in Table 4.8.

Table 4.7: The Policy Framework for Monetary Control in a Sample of Six Developing Countries

Country	Exchange rate arrangement	Intermediate targets	Operating targets
Argentina	Austral. Introduced in June 1985, has in some periods been fixed vis-a-vis the US dollar; in other periods adjusted on a continuous basis	Monetary aggregates.	Interest rates on central bank bills, debt sales.
Brazil	Cruzado. Frequent adjustments vis-a-vis the U.S. dollar, in line with relative inflation. Temporarily fixed against the U.S. dollar under the Cruzado Plan Feb.-Oct. 1986.	Monetary aggregates, real interest rates.	Base money, overnight interest rates.
Indonesia	Rupiah. Managed float, basket of currencies used as indicacor.	Monetary aggregates and monetary base. Domestic credit before October 1984.	Exchange rate, interest rates.
Malaysia	Ringgit. Determined on the basis of a basket of currencies.	Broad monetary aggregates.	Exchange rate, long-term inter-bank rates, recently overnight inter-bank rates.
Mexico	Peso. Two-tier system, with a free and controlled market depreciated daily, by predetermined amounts.	Monetary aggregates.	Interest rates, debt sales.
Thailand	Baht. Determined on the basis of a basket of currencies.	Multiple monetary targets are used as a guide for policy.	Reserve management loosely implemented.

Source: R.B. Johnston and O.P. Breck, Monetary Control Procedures and Financial Reforms: Approaches, Issues and Recent Experiences in Developing Countries, IMF Working Paper WP/89/48, 1989, Washington, D.C; Kiriwat, Ekamol, Financial Sector Reform: Thailand, (Mimeograph), paper submitted to a Seminar on Financial Sector Reforms in Asia and Latin American Countries: Lessons of Comparative Experiences, Santiago, Chile, May 1992.

Table 4.8: Instruments for Monetary Control in a Sample of Six Developing Countries

Country	Primary issues of securities	Instruments of daily money market management	Other market-based instruments	Rediscount facilities	Direct controls	Reserve requirements
Argentina	Weekly auctions of participation in government papers in the form of central bank bills.	Repurchase/reverse repurchases, foreign exchange swaps.	--	Several, including subsidized facilities	Interest rate regulation. Quotas on non-regulated rate deposits and savings	Actively varied.
Brazil	Weekly auctions of central bank bills (and treasury bills, but mainly for budgetary finance).	Repurchases/reverse repurchases, and outright sales.	--	Several, including subsidized facilities.	Selective credit controls.	Not actively varied.
Indonesia	Auctions of central bank bills. The frequency of auctions has varied between daily and weekly.	Repurchase agreements and daily auctions of central bank bills.	--	Several, including subsidized facilities.	Interest rate and credit controls lifted as part of financial reform.	Not actively varied.
Malaysia	Weekly auctions of treasury bills solely for government finance purposes.	Discount window, outright sales and purchases of government securities, repurchase/reverse repurchases, foreign exchange swaps, recycling of government deposit.	--	Several, including subsidized facilities.	Interest rates liberalised, selective credit controls remain in effect.	Not actively varied.
Mexico	Auctions of treasury certificates.	Outright sales and purchases and repurchase/reverse repurchases.	Weekly auctions of fixed deposits and placements from the central bank.	--	Credit ceilings.	Actively varied.
Thailand	Weekly auctions of treasury bills, but of limited importance for monetary management	Repurchases/reverse repurchases: discount notes.	Central bank issues.	Several, including subsidized facilities.	Interest rate ceilings, direct controls as credit in 1994.	Not actively varied.

Source: R.B. Johnston and O.P. Breck, "Monetary Control Procedures and Financial Reforms: Approaches, Issues and Recent Experiences in Developing Countries," IMF Working Paper WP/89/48, 1989, Washington, D.C.; Kiriwat, Ekamol, Financial Sector Reform: Thailand, (Mimeograph), paper submitted to a Seminar on Financial Sector Reforms in Asia and Latin American Countries: Lessons of Comparative Experiences, Santiago, Chile, May 1992.

Lessons from International Experience

4.42 The experiences of the selected industrial and developing countries in the use of indirect monetary control procedures has been discussed in the earlier part of this chapter. Before coming to the lessons from these experiences, two broad tendencies in initiating indirect monetary policy procedures can be observed. The first tendency is that there are some common features of these experiences, despite the fact that the techniques and procedures employed by individual central banks both in developed and developing countries are different in some respects, being strongly influenced by differing institutional, legal and political environments. In general, innovations affecting the use of central bank credit facilities, new market instruments and the adoption of RRs have been designed to make the implementation of money market policy more flexible and to ensure its effectiveness in a more complex environment. In the US, discount rate changes were geared to make open market operations more effective and the reserve targets have been varied to enable the banks to influence market rates through changes in their demand for reserves. In the UK, the changes in the bank rate were part of an effort to overcome a propensity to delay making changes in official posted rates by permitting market judgements based on developments in the money market. France introduced a penalty rate in its discount operations, while Japan rationed credit lines by window guidance. However, the thrust of changes was in one direction--to make the central bank discount rate market-oriented to the extent possible and consistent with market operations, either through outright purchases and sales or through reverse repurchases. The developing countries covered here often followed the lead provided by the industrial countries, and they generally curbed automatic access to central bank-lending through the introduction of bank specific ceilings or by introducing penalty rates on extended credit. Also, they made an effort to reduce the range of special credit facilities in favor of a generalized lender of last resort window based on secured loans.

4.43 The second tendency observed was that both industrial and developing countries did not wait for institutional changes to precede the changes in the monetary control procedures when they switched to the indirect methods of control. Their systems were not at the same stage of development, sophistication or competitiveness. France and Japan for instance, had a longer history of controlled financial systems which worked more on guidance, while those of the US and UK have been highly competitive. As far as the developing countries are concerned, the development of indirect monetary control procedures usually did not wait for the financial institutions and environment to be competitive. The process of indirect monetary control procedures, once begun, interacted with the system and gradually the system tended to adapt to a more impersonal arrangement of credit allocation and competitive pricing of loans.

4.44 There are several lessons that are relevant to Korea as it moves towards market based monetary policy instruments. First, it is often difficult to ensure the success of indirect monetary policy procedures if the central bank either becomes a residual source of finance for government or if it tries to control interest rates on government

securities by intervening in the primary or secondary market for government debt. This means that it is necessary to place a ceiling on direct central bank credit to the Government or to create conditions under which the central bank will refrain from intervening in the government bond market to keep down interest rates. It is also necessary that seasonal or random fluctuations in a government's cash position, which can pose a large potential source of disturbances in the supply of bank reserves, are avoided.

4.45 Second, RRs, though continued as a monetary policy instrument, should be managed in such a way that the reserve requirement level is kept sufficiently low so as not to constitute a heavy tax on financial intermediation. The main consideration is that the level of RRs should be enough to meet the clearing needs of the system. Furthermore, the RRs, when used as a monetary policy complementing market operations or to shelter certain domestic interest rates from external influences as controls on international capital movements, are relaxed.

4.46 Third, outright purchases of securities in the open market, often regarded as the purest form of open market operations, were of major importance in well developed financial markets such as the US and UK. These were less important in other countries where the use of repurchase agreements was more prevalent. The developing countries also have relied on this form when they moved from a direct to an indirect monetary policy control mechanism. The main advantage of this approach is that the operations can be implemented quickly, without a significant effect on the prices of the underlying securities.

4.47 Fourth, the institutional changes that occurred in the money and foreign exchange markets following the initiation of indirect monetary control procedures have no doubt contributed to a greater integration of the money market domestically and internationally. However, market integration and the greater influence of market expectations on interest rate determination tended to impose constraints on monetary policy. While money market strategy and instruments have been geared more to taking exchange rate as well as domestic interest rate determination into account, developments in the market have increased the risk that exchange rate and domestic money stock or interest rate objectives come into conflict.

4.48 Fifth, in the developing countries covered in this chapter, use has been made of a regular auction--either for central bank or treasury bills--for monetary control purposes. Under these auctions, the public submits bids containing the volume demand and a bid price to the central bank for treasury/central bank bills on auction, and the central bank accepts or rejects bids on the basis of a cut-off yield determined to be consistent with their desired operating target for monetary policy. The most widely used operating target has been short-term interest rates; other operating targets have included various liquidity measures. Some countries have instituted a formal limitation on cut-off yield in the auctions. This means that the auction is somewhat managed when the developing countries begin a transition to indirect monetary control procedures.

4.49 These are some broad lessons from the experiences of the industrial and developing countries and though they differ in broad details, there is some underlying unity in their experiences.

E. Summary and Recommendations

4.50 Monetary policy in Korea has been ineffective since the automatic policy loans provided by the BOK on behalf of the Government create reserve money. The interest rate subsidy on these loans also adversely affects monetary policy management. As a result, the BOK's ability to conduct monetary policy is very much constrained. The monetary policy objectives in Korea have had dual goals--price stability and economic growth. However, because of the possible conflict between them, a balance between these objectives has been maintained by occasionally switching the targets.

4.51 M2, one of the measures of broad money, has been the frequently used as the intermediate target, and the monetary base as the operating target. These targets are reviewed continually to take into account unanticipated developments in the economy. The targets have been more often than not within the desired range, though of late, M2 as a monetary policy target has lost much of its significance due to the emergence of substitutes for M2 from the operations of NBFIs.

4.52 At present, the BOK has basically three indirect instruments of monetary policy--rediscount policy, RRs, and the limited degree of open market type of operations. These have been operated in the past in combination with other direct-instruments of control such as ceilings on bank credit and interest rates and window guidance of one type or another. The rediscount policy has not been very effective, not least because the rediscounts directed towards liquidity management were a small part of total rediscounts, apart from the adoption of generally concessional rediscount rates charged on bank access to the BOK. RRs, though potentially a powerful instrument, are less frequently used in the BOK, as they have tended to have an adverse impact on the portfolio of banks and the liquidity of the financial markets. It has also less flexibility relative to open market operations, which have been resorted to in recent years. However, the effectiveness of open market operations is attenuated by the practice adopted by the authorities to offer interest rates on paper such as MSBs used in open market operations which are lower than the market interest rates. This has discouraged the holding of MSBs by on a wide scale, and consequently the development of a secondary market for these bonds, essential for effective open market operations. Besides, there is a lack of diversity of paper used in open market transactions as the Government's issue of Treasury bills is limited. Though of late this gap has been filled, it is not on a scale desired for the conduct of open market operation as a major indirect monetary policy instrument.

4.53 If monetary policy is to succeed in Korea in achieving its targets of M2 or any variant of it, it has to have influence over money multiplier behavior. This is because M2 depends more on the changes in the money multiplier than on changes in the monetary base. Of all the monetary instruments, open market operations possess a greater power to

change the opportunity cost of holding currency by targeting monetary base as well as the interest rates as the intermediate targets, and by shifting the emphasis between the two in accordance with the needs of emerging situations. This is amply demonstrated by the experience of both developed and developing countries which switched in recent years to indirect monetary policy instruments.

4.54 Korea would also benefit by a move towards indirect monetary policy instruments. The reasons for this are the following: (i) banks and financial markets have developed ways to avoid direct monetary control procedures; (ii) the use of direct controls imposes costs on banks in the form of loss of competitiveness vis-a-vis NBFIs or foreign banks; (iii) the complexity of financial markets makes it very difficult for the monetary authorities to exercise direct control effectively; (iv) with current account transactions being largely liberalized, money supply variations have been more frequent, which do not lend themselves to direct monetary controls; and (v) with a move towards a flexible exchange rate regime, the monetary authorities can be in a better position to control money supply through resorting to indirect monetary control procedures.

V. CREDIT ALLOCATION SYSTEM

Introduction

5.1 The GOK has used the financial sector to support its industrial policy. This has been achieved largely through the allocation of credit to selected sectors and enterprises in the form of policy loans at below market rates. This chapter discusses the scope and size of policy loans, the sources of such loans, their cost to the financial system, and their impact on the banking system and the BOK. Relevant international experience is also presented.

A. Scope and Size of Policy Loans

5.2 The Government's role in credit allocation in Korea has taken the form of government-directed loans or policy loans in total domestic credit. The Government's intervention to deliberately influence the system of credit allocation was officially initiated in order to stimulate industrialization and economic activity. A large amount of the policy loans provided by banks has also been rediscounted by BOK almost automatically.

5.3 At the end of 1991, total policy loans amounted to W 151.2 trillion, or 39.7 percent of total domestic credit and the assets of KDB and KEXIM (Table 5.1 and Table A.1 in Annex A). The share of policy credit climbed to 44.4 percent in 1987 and has gone down slowly.

5.4 The Government has been actively involved in policy loans and has been responsible for all aspects of their management, including policy-making. Policy loans are operated in accordance with an annual fund raising and loan plan prepared by the MOF, while their actual management is entrusted to the Governor of the BOK. Table 5.2 and Annex A.2 in Annex A show the different policy loans and their respective share of total policy loans.

Table 5.1: Korea - Outstanding Policy Loans by Sources, 1976-91
(Percent)

	1976	1980	1985	1989	1990	1991
Pref. Finance						
Government Fund	1.8	1.9	2.4	3.0	2.9	2.9
NIF	1.4	1.5	1.5	1.1	0.8	0.7
Credit to	0.9	1.0	0.6	6.3	6.1	5.4
KDB/KEXIM	4.0	9.9	5.2	6.5	6.7	6.8
Foreign Exchange	5.4	6.6	5.0	1.4	1.6	1.5
Trade	0.9	2.9	1.8	2.3	2.3	2.4
Medium Industry	1.9	1.6	1.8	2.7	2.6	2.6
Agri/Fisheries	1.8	3.6	4.0	5.3	5.5	5.5
Housing	5.3	2.4	4.3	8.5	7.9	5.0
Other	23.4	31.5	26.7	37.1	36.5	32.8
Total						
Other Pref. Finance	8.4	12.9	15.7	6.4	6.2	6.9
Total Policy Loans	31.8	44.3	42.4	43.5	42.7	39.7
Domestic Credit + KDB + KEXIM	100	100	100	100	100	100

Note: Domestic credit adjusted to include assets and KDB and KEXIM as calculated below. The figures below are in billions of Won.

Domestic Credit	4,837	16,778	42,561	70,089	96,888	118,186
KDB Assets	3,636	8,850	14,991	17,525	23,341	29,212
KEXIM Assets	81	557	5,159	2,214	2,723	3,819
Total	8,554	26,184	62,710	98,828	122,952	151,217

Note: Total preferential finance includes assets of KDB and KEXIM. To calculate current numbers, the total assets of the two institutions were added to domestic credit.

Source: National Statistics Office, Korean Economic Indicators, February 4, 1992.

Table 5.2: Korea - Share of Policy Loans, 1976-1991
(Percent)

	1976	1980	1985	1989	1990	1991
Pref. Finance						
Government Fund	5.7	4.3	5.6	6.9	6.7	7.2
NIF	4.5	3.5	3.6	2.4	2.0	1.6
Credit to KDB/KEXIM	2.9	2.2	1.5	14.5	14.3	13.6
Foreign Exchange	12.7	22.4	12.4	15.0	15.8	17.3
Trade	17.0	14.8	11.8	3.2	3.7	3.8
Medium Industry	2.8	6.6	4.2	5.3	5.5	5.9
Agri/Fisheries	5.8	3.6	4.1	6.2	6.2	6.6
Housing	5.7	8.1	9.5	12.2	12.8	13.9
Other	16.5	5.5	10.2	19.5	18.5	12.7
Total	73.6	71.0	62.9	85.3	85.5	82.6
Other Pref. Finance	26.4	29.0	37.1	14.7	14.5	17.4
Total Policy Loans	100	100	100	100	100	100

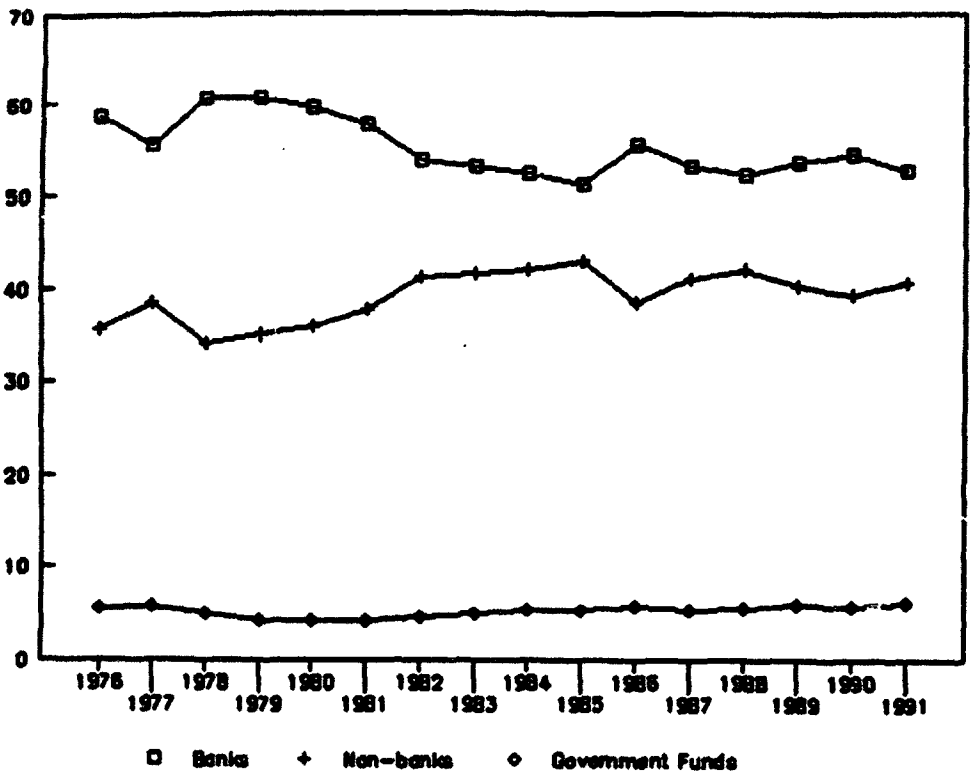
Note: Other Preferential Finance represents finance to KDB and KEXIM but nets out the credit that appears in the Preferential Finance data.

Source: National Statistics Office, Korean Economic Indicators, February 4, 1992.

B. Sources of Policy Loans

5.5 In recent years, the major sources of the policy loans are DMBs, NBFIs, and the Government. In 1991, the DMBs accounted for 53.0% of the total policy loans, followed by the NBFIs (40.7%) and the Government (6.3%). The share of DMBs peaked around 60.7% in 1978 and declined to 51.4% in 1985, but has since increased (Chart 5.1).

Chart 5.1: Korea - Share of Policy Loans of Banks and Non-banks, 1976-91
(Percent)



Source: National Statistical Office, Korean Economic Indicators.

5.6 Deposit Money Banks (DMBs). Policy loans of DMBs are divided by source of funds into loans from their own funds, and from government funds. The loans are used to finance exports and imports, small and medium enterprises, overseas construction contracts and exports of services, and preparations for agricultural exports and marine products. DMBs are allowed to obtain funds from the BOK of up to the equivalent of 30-90 percent of the policy loans they have made.

5.7 Commercial banks (DMBs and local banks) are also required to extend a certain portion of the increment in their loans from banking funds to SMEs. In the case of Dongnam and Daedong Banks, the minimum ratio is 90 percent, 80 percent for local banks, and 35 percent for other nationwide commercial banks and foreign bank branches. This ratio is 25 percent in the case of foreign bank branches which do not make use of the BOK's rediscount window.

5.8 The composition of policy loans of DMBs as of the end of 1991 and its share of total loans were as follows: housing (W 9.7 trillion, 48 percent), equipment of export industries (W 3.2 trillion, 16 percent), , agriculture (W 2.3 trillion, 12 percent), foreign trade (W 2.2 trillion, 11 percent), , fisheries (W 0.5 trillion, 3 percent), livestock (W 0.6 trillion, 3 percent) special equipment loans (W 0.9 trillion, 4 percent), and rural private debt subsidization (W 0.4 trillion, 2 percent).

5.9 Non-Bank Financial Institutions (NBFIs). The KDB continues to operate as the financing arm of the Government's industrial credit programs and principal agent for the Government's preferential credits, upon which KDB is excessively reliant for domestic currency funding. KDB's outstanding loans in the form of policy loans amounted to W 9.3 trillion, while borrowings from the Government and from the NIF to support these loans amounted to about 73 percent of its total borrowings at the end of 1991. The policy loans of the KEXIM consist of medium- and long-term financing for the export of capital goods such as industrial plant and ships, and supporting overseas investments and major natural resource development projects. Borrowings from the NIF to support these loans accounted for 34 percent of its total borrowings in 1991.

5.10 The share of NBFIs in total policy loans, which started at over 30 percent in the mid-1970s, increased to a 40 percent level by the end of the 1970s, and maintained this level during the 1980s (Table 5.3). By 1990, policy loans of NBFIs accounted for 41 percent of total policy loans.

5.11 Central Bank Rediscounting. The BOK supplies credits to banking institutions either by rediscounting commercial bills or by extending loans against the collateral provided by selected financial assets of banks. Commercial bills issued and/or accepted by eligible enterprises, or guaranteed by the Korea Credit Guarantee Fund or the Korea Technology Credit Guarantee Fund are eligible for rediscounting up to 50 percent of the amount discounted by banks. Loans for foreign trade are also eligible for rediscounting against collateral by the BOK within 30 percent of the loan granted by banking institutions, or 50 percent where the underlying loan is granted to SMEs. Loans against collateral for agriculture and fisheries are extended up to 50 percent granted by the National Agricultural Cooperative Federation and the National Federation of Fisheries Cooperatives, while loans for livestock breeding granted by the National Livestock Cooperatives Federation are eligible for loans against collateral within 40 percent.

5.12 As of the end of 1991, each banking institution could make use of the BOK's rediscount facilities for up to 70 percent of the total amount it had lent to SMEs not listed on the Korea Stock Exchange and for up to 60 percent of that to listed SMEs. In addition, general loans are also available for banks against their specific participation in a few types of policy loans such as loans to SMEs and equipment loans to export industries, or for those which have fallen temporarily short of reserve requirements. As of the end of 1991, policy loans accounted for 95 percent of the BOK's total loans and rediscounts (para. 4.8).

C. Impact of Directed Credit on the Financial System

5.13 The banking system was the most important channel for implementing the directed credit policies of the Government. It is the part of the financial system most affected by subsidized interest rates, subsidized rediscounting and preferential finance. The impact of the Government's policy was reflected in a declining share of total loans originating from the system. Due to the expansion of credit in the HCI sector and the construction boom in the Middle East in the 1970s, Korea experienced a rapid growth in its money supply. The inflationary pressure was further aggravated by the sectoral imbalance in the allocation of resources. As inflation accelerated, speculation in real assets became rampant and made financial savings unattractive since real interest rates remained low.

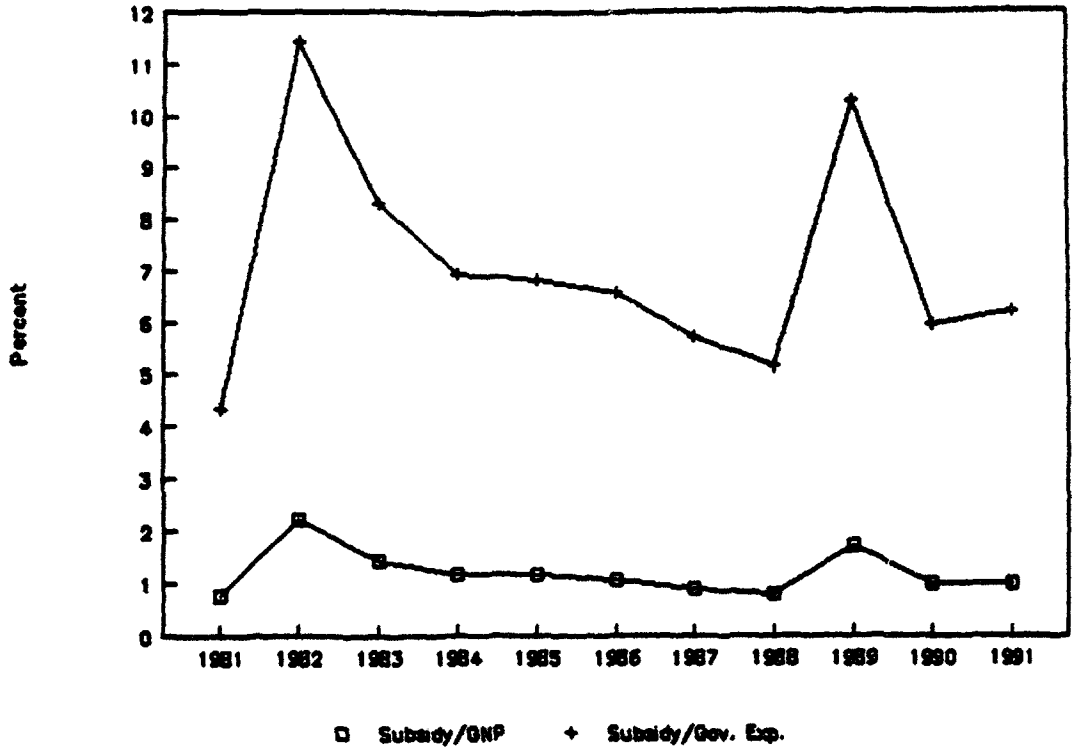
5.14 The system of credit allocation had an adverse effect on the development of the financial sector, not only with respect to its growth, but also with respect to the quality of its services. Intervention in the banking industry (i.e., in day-to-day management and in its asset allocation decisions) impeded the development of professional bank managers and removed any incentive for the banks to become more efficient in the intermediation of financial resources. Nor did the banks have much incentive to select profitable borrowers since they were not rewarded for doing so. Rather, banks passively accommodated the credit demands of the government-favored borrowers. The repressed interest rates, which fluctuated around zero or negative in real terms, made bank deposits quite unattractive financial assets and made the holders of bank deposits the ultimate bearers of the cost of financial intervention. Consequently, the development of the financial sector has been retarded in comparison to the vitality of the real sector. Furthermore, the large losses suffered by many industrial groups have weakened the profitability and financial position of commercial banks, which have experienced a decline in their relative importance in the Korean financial system.

5.15 Much of the discussion of the costs of credit policies, including credit allocation, focusses on the experience of the 1970s when the HCI drive was underway. This was influenced by the overcapacity of many heavy industrial sectors that suffered large losses in the aftermath of the second oil crisis and the worldwide economic recession of the early 1980s. The result of the Government's directed lending policy was that the banks entered the 1980s with a substantial proportion of non-performing loans. With their asset structure undermined, commercial banks could have become prey to a crisis of confidence in the banking system, but for the fact that they were largely government-owned.

5.16 The quantifiable cost to the financial system is quite substantial. Interest rate subsidies extended to policy loan borrowers in 1991 amounted to about W 2.0 trillion, or 1.0 percent of GNP, and 6.2 percent of government expenditures. The amount of annual subsidy has ranged from a high of 2.2 percent in 1982 to a low of 0.8 percent in 1981. The cumulative subsidy during 1981-91 amounted to W 13.3 trillion, or an average of W 2 trillion p.a. (Chart 5.2 and Annex B). The estimated amount of interest rate subsidies was calculated on the basis of comparing the corporate paper rate against the average on-lending rate of three

widely utilized policy loans: the export promotion fund, the machinery industry promotion fund, and the NIF. The resulting average interest rate differential is then applied to the outstanding amount of policy loans to arrive at the amount of interest rate subsidy. The other cost such as cost of carrying non-performing assets on the books of the banks and the BOK can not be calculated because of lack of reliable data.

Chart 5.2: Korea - Estimation of Subsidy Provided by Policy Loans, 1980-91



Source: Bank of Korea, Monthly Bulletin; IMF, International Monetary Statistics, 1991.

5.17 Impact on the Bank of Korea. The relative emphasis of the Government's credit allocation policy applied to the banking system has had a major impact on who bears the cost and risk of intervention. The use of subsidized rates and preferential finance has transferred the financing burden from the government budget to the BOK and the banking system. The transfer of this burden, together with an increasing overhang of non-performing loans, has adversely affected not only the profitability of the domestic deposit money banks, but also the ability of the BOK to conduct monetary policy.

5.18 The discount window of the BOK plays only a limited role in monetary policy because many of the BOK loans are automatic rediscounts of policy loans by the banking sector. As a large part of the policy loans were eligible for rediscounting with the BOK, the effect was an increase in reserve money. To absorb liquidity, the BOK issued a large amount of

MSBs at below market rates and sold mainly to a captive market of NBFIs. However, the progressive expansion of outstanding MSBs has had some negative effects. The interest payments required to service MSBs served to bring about additional expansion of the money supply. This also lead to crowding out. Although the interest rate on the MSBs is below market, the BOK still incurs a negative spread of 6 percent p.a.--the spread between the MSB rates and the discount rates.

5.19 Table 4.1 in Chapter IV provides a breakdown of loans and discounts of the BOK during 1985-91. As of December 31, 1991, such loans amounted to W 13.5 trillion. As a percentage of the annual budget deficit during this period, the subsidies ranged from 1-3 percent during 1975-82. If the outstanding amount of policy loans of W 14 trillion and the outstanding amount of MSBs of W 15 trillion as of May 31, 1992 were combined, the cost of carrying the policy loans would be roughly W 1 trillion, or approximately 2 percent of the 1991 budget, and one-tenth of 1 percent of the GDP. However, this cost is substantial when compared to the BOK's operating deficit of W 1.27 trillion during the January to May 1992 period, against its reserves of W 1.34 trillion.

D. The Plan for Credit Deregulation

5.20 It is well recognized in Korea that the volume of all policy loans is large and needs to be reduced substantially over time if the present system of credit allocation is to be replaced by indirect monetary controls. Since the adoption of an indirect monetary control policy to replace the present system of direct credit control is being contemplated by the Government, it is important that the operating deficit of the BOK which emanates from the policy loans be properly financed through the budget. Some of the options for addressing the policy loans in general and those handled by the BOK are discussed below.

5.21 Gradual Reduction of Policy Loans. Policy loans in the past have been targeted to support development of these productive sectors and consequently contributed to the growth of the economy and significantly changed the structure of the manufacturing sector. However, the direction of preferential finance has changed considerably in the 1980s. Although it still reflects broad government objectives of supporting priority industries, policy loans are now targeted at sectors like housing, agriculture, fishery, and livestock, while the credit risks continue to be left to the banking system. One option is that the Government should continue in the direction it has already taken in sharply reducing directed credit activities. More specifically, it is recommended that the Government should prepare a plan for phasing out all policy loans within 5 years. Given the magnitude of the policy loans and its broad reach it is appreciated that this will take time. In the meantime, it is recommended that the policy loans provided by the BOK be addressed on a priority basis.

5.22 BOK's Policy Loans. To improve the management of monetary policy the Government should limit BOK's role to managing and administering the rediscount window, with the function used only as a monetary policy tool for liquidity management rather than the one of

providing policy loans to various sectors. This could be achieved in several ways. One way to achieve this objective would be the transfer of all policy loans from the BOK to specialized financial institutions. The other option will be the creation of a special fund to take over the policy loans from the BOK.

5.23 In some countries (Philippines, Turkey), policy loans were initially promoted by the central banks, but were later transferred to specialized financial institutions as the conduct of monetary policy became more complicated. In a deregulated financial market, the role of the central bank moves from one of direct control to one of indirect control. The specialized institutions are better equipped to handle such policy loans and the cost associated with such operations can then be financed transparently through the budget rather than through taxing the financial system. In Korea, there are several specialized institutions which can take over these policy loans from the BOK. All the export loans can probably be transferred to the Export-Import Bank. The Industrial Bank of Korea (IBK) can take over the small and medium industries loans, and the Agriculture Cooperatives can assume the agriculture loans. These institutions can operate rediscounting facilities for these loans.

5.24 With the transfer of policy loans, there are several issues which need to be addressed. The first issue is the mechanism to effect the transfer of these loans. The transfer of these policy loans could probably be done in the following ways.

5.25 One example is the transfer of W 10 billion small and medium industry policy loans (SMI loans) to the IBK to illustrate this process.

5.26 Step 1: BOK will either sell or transfer outright W 10 billion portfolio of SMI loans to the IBK. Since IBK does not have resources to purchase the loans, the BOK will provide a loan of W 10 billion on terms on conditions to be negotiated. The balance sheet of BOK and IBK will look like this:

BOK			
Assets		Liabilities	
SMI Loans	-10		
Loan to IBK	+10		

IBK			
Assets		Liabilities	
SMI Loans	+10	BOK	+10

5.27 Step 2: The Government will then provide a loan of W 10 billion to the IBK at a rate equivalent to the return on the SMI portfolio, less a margin to cover the operating cost of such a facility and risk. The Government will provide the loans by issuing treasury bills (T-Bills), to IBK.1/ IBK will then pay off its loan to the BOK by delivering the treasury bills to the BOK. The BOK will now have treasury bills as assets. The balance sheets will look like this:

1/ Alternatively, the Government can simply increase the capital of IBK.

BOK	
Assets	Liabilities
Loans to IBK -10 T-Bills +10	

IBK	
Assets	Liabilities
SMI Loans +10	GOK +10

The final balance sheet will therefore look like this:

BOK	
Assets	Liabilities
T-Bills +10	

IBK	
Assets	Liabilities
SMI Loans +10	GOK +10

5.28 Assuming that the GOK would like to gradually phase out the policy loans, it will need to cover the cost of the policy loans by providing the specialized institutions with adequate resources. This could be achieved by either meeting the deficit on an annual basis or through capitalization. Once the benchmark for setting the interest rate is established, the subsidy on policy loans can be related to the benchmark rate and the subsidy can be phased out gradually by raising the interest rate on policy loans to the benchmark rate.

5.29 The proposed measures will involve changes in the institutional arrangements which may or may not require legislative changes. These issues need to be carefully explored. The advantage of the proposed approach is that it would remove a major distorting element in the structure of interest rates and thus enable a rapid deregulation of interest rates as contemplated by the authorities. As a consequence, indirect monetary policy control will be facilitated without causing any immediate dislocation in the provisions of policy loans. In terms of actual costs to the Government, it has been estimated that the cost of transferring policy loans to the specialized financial institutions would be about W 1.5 trillion in the first year and W 190 billion in the second year.2/

5.30 However, it is appreciated that transforming all policy loans at one go may not be feasible. Therefore, the GOK should consider transforming at least BOK policy loans which are of a developmental nature. Interest rate subsidies on any remaining policy loans with BOK are to be progressively removed and the volume reduced. The carrying cost of policy loans transferred to the specialized institutions is to be funded by the budget. This measure will remove a major distortion in the

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2/ The costs were arrived at by multiplying the outstanding BOK rediscounts net of rediscounts for liquidity control (W16,415 billion), with the average yield of MSBs (14.65%) and margin to cover the operating cost (0.5%), less the weighted average of rediscount rates (5.82%). The calculation for the first year is as follows: W16,415 billion x (14.65% - 5.82% + 0.5%) = W1,532 billion. For the second year, the BOK outstanding rediscounts is to be replaced by specialized financial institution rediscounts for new policy loans and is calculated as follows: W2,000 billion x (14.65% - 5.82% + 0.5%) = W187 billion.

financial system and therefore facilitate the emergence of market rates on all financial assets.

5.31 The other option which the GOK should consider is the creation of a special fund which can be used as a vehicle to absorb the policy loans from the BOK. The fund will take over both the policy loans and matching MSB liabilities from the BOK. The fund could replace MSBs with Treasury bills as they mature.

E. Summary and Recommendations

5.32 The GOK has intervened extensively in the financial system and the main vehicle which is used to direct resources to the priority sectors is through policy loans. At the end of 1991, total policy loans accounted for 39.7 percent of total domestic credit and the assets of the KDB and KEXIM. The share of policy loans during the last five years (1986-91) has averaged 42.7 percent. By any standards, the amount and proportion of policy loans in Korea is very high. The size of the policy loans is substantially more of the rediscount loans provided by the BOK are included. At the end of 1991, such loans from BOK rediscount window amounted to about Won 13.5 trillion. Total cost of providing such policy loans in 1991 amounted to 2.3 trillion, or 1.1 percent of GNP.

5.33 The use of policy loans as an industrial policy tool worked reasonably well initially but ran into difficulties when a large amount of policy loans were made available for developing and financing HCIs. This led to large non-performing loans in the banking system which took a while to work out.

5.34 There are several major drawbacks of the directed credits in Korea. First, it is essentially a tax on the banking system and small depositors. Policy loans at below market rates reduce the profitability of the domestic banks and retard the development of robust financial markets. Second, the existence of large policy loans at below market rates combined with the controlled deposit rates adversely affect the efficiency of the banking system. Third, the existence of policy loans increase moral hazard and impede the development of professional banks as the credit risk is implicitly assumed by the government. Fourth, large policy loans made available through the rediscount window of the BOK at below market rates constrain the ability of the BOK to conduct monetary policies and adversely affect its profitability.

5.35 Therefore, it is recommended that the GOK consider: (i) reducing the amount of policy loans and size of interest rate subsidy through a step by step approach over a period of 4-5 years; (ii) confining the role of the rediscount window of the BOK to that of a traditional central bank. At a start, policy loans of a developmental nature on the books of BOK should be transferred to specialized financial institutions or a special fund and the cost of maintaining such policy loans by the specialized institutions should be financed by the GOK through the budget. Interest subsidies on any remaining policy loans with BOK are to be progressively removed and the volume reduced. Budgetary impact of such a transfer appears manageable and the net impact will be no more that what is being financed now by BOK.

VI. FOREIGN EXCHANGE SYSTEM LIBERALIZATION AND FOREIGN EXCHANGE MARKETS IN KOREA

Introduction

6.1 Korea initiated a financial liberalization program beginning in 1981, but it was not type of liberalization strategy familiar in economic literature or in the Southern Cone countries[1/] where it reached its apogee in the late 1970s and early 1980s. Two features distinguished financial deregulation in Korea from the strategy pursued in other countries. First, Korea achieved positive real interest rates or competitive conditions in the financial market more by utilizing market-oriented regulations than by eliminating them. Second, Korea has maintained (even during the controlled phase of financial liberalization) strict restrictions on the capital account on the grounds that a free capital account would induce capital flight and spawn more serious macroeconomic and financial system instability. There was some basis for the economic rationale underlying this approach as will be discussed later in this chapter, but a greater support for it stems from the historical experience of Korea in the mid-1960s, when it started financial deregulation. Since that time, Korea has moved a long way towards the liberalization of the capital account through a series of small steps, though the capital control mechanism remains in place. However, the current account of the balance of payments is considerably free to a point that Korea has formally accepted the obligations of Article VIII of the IMF Agreement, effective November 1988.

6.2 In this chapter, a succinct description of current and capital account liberalization is presented in Section A. This is followed by a description of the emerging foreign exchange market in Korea in Section B. Section C proceeds with the analysis and implications of the full opening of the capital account in the context of the proposed deregulation of interest rates in Korea beginning from 1992. A summary and recommendations are offered in Section D.

A. Foreign Exchange System - Its Legal Basis and Structure

6.3 Foreign exchange arrangements in Korea are governed by three interrelated Acts--the Foreign Exchange Management Act (FEMA), the International Trade Act (ITA) and the Foreign Capital Inducement Act (FCIA). The FEMA covers management over foreign exchange transactions, the exchange rate system, concentration of foreign exchange, payment and receipts of foreign exchange including credit or liability transactions, contracts, etc. that initiate such payments or receipts, and certain particularly short-term capital movements. It specifies the business and responsibilities of the exchange regulatory authorities such as the Bank of Korea (BOK), and foreign exchange business carrying institutions like foreign exchange banks and money changers. Basically, it sets forth the essential principles for regulating

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1/ See James A. Hanson, "An Open Capital Account: A Brief Survey of the Issues and the Results," March 1992.

foreign exchange transactions. Owing to the variety and constant changes in foreign exchange transactions, this Act is kept flexible in scope and application so that changes in transactions are easily accommodated without having to amend the FEMA. As in the case of all other laws, the FEMA is complemented by presidential decrees and regulations which define the framework of exchange arrangements. The actual administration of the exchange system is performed by the Ministry of Finance (MOF) through regulations, though the MOF also delegates a part of this regulatory authority to other institutions.

6.4 The basic role of the ITA is to regulate commodity flows (as distinct from the money flows which are regulated by the FEMA). However, since the money flows accompany the commodity flows, both these Acts overlap in respect of certain provisions, though a consistency is maintained in their application. The FCIA is concerned with encouraging investment of foreign capital and with the regulation of inward direct investment, long-term loans of US$1 million or more with a repayment period of more than three years. In the event of any conflict arising between the FEMA and FCIA, the provisions of the latter hold.

B. Exchange Arrangements in Korea

6.5 Until 1965, the Korean economy had been severely repressed, with pervasive controls on foreign trade and payments, industrial investments, prices and financial institutions. In such a system, the central bank had to make the market for foreign exchange. Private foreign exchange dealers, banks and multinational firms were powerless to facilitate market transactions in the foreign exchange market because exchange controls prevented them from moving capital in and out of the country. Potential private dealers could not freely assume positive or negative positions in foreign exchange (against domestic currency), nor were they collectively capable of establishing a market-clearing exchange rate. Government intervention became unavoidable in such circumstances, since without it the exchange market would have tended to be highly liquid and extremely unstable. For any government intervention, it was necessary for it to establish an exchange rate--fixed, floating or managed float, depending upon what the authorities desired at a particular juncture.

6.6 However, the situation in Korea has changed radically since 1982, when a guided financial liberalization was launched. The exchange controls were gradually relaxed in conformity with the less restrictive character of the financial markets and the mode of fixing the exchange rate was changed first from the fixed exchange rate to the SDR basket-related combined with a trade weighted exchange rate which lasted until March 1990, and then to the market-average exchange rate as referred to later in this chapter. In keeping with this, the exchange arrangements also underwent radical changes.

Current Account Transactions

6.7 Current account transactions in Korea have been almost totally freed from regulations over the last fifteen years, and what now remains by way of restrictions are more apparent than real. The current account regulatory system can be seen in three parts: surrender requirements for

foreign exchange earned, payments for imports and invisibles, and holding of foreign currency accounts. Concentration of foreign exchange takes four forms: selling foreign exchange, depositing, registering and placing in custody. All four refer to foreign exchange over US$5,000 earned or brought by a resident into the country which must be surrendered to a foreign exchange bank at its posted customer rate or be deposited in foreign currency accounts in banks. Non-residents have only to register any foreign exchange brought into the country in excess of US$5,000. This can be accomplished either by placing the foreign exchange at a foreign exchange bank or at a customs office, or by declaring the amount on a certification of declaration of foreign exchange. There are a few exceptions to these procedures, but they do not in any way affect the core of foreign exchange transactions.

6.8 The institutions where foreign exchange is concentrated are the BOK (the principal one), the Foreign Exchange Equalization Fund, and foreign exchange banks, money changers, etc. However, eventually all foreign exchange is concentrated in the BOK, as there are ceilings on the foreign exchange holdings of foreign exchange banks operated through what is known as a position management system, started in 1981, under the Foreign Exchange Control Regulations of the MOF. This system regulates the overall position (both forward and spot) of foreign exchange banks. The foreign exchange banks are required to comply with the ceilings on their foreign exchange holdings on a daily basis. The required overbought position of each foreign exchange bank is equivalent to 200 percent of the previous month's total of foreign exchange bills bought. On the other hand, the overall oversold position ceiling is limited to 20 percent of the previous month's average outstanding foreign exchange bills bought or US$10 million, whichever is higher. The ceiling on oversold spot exchange position is 5 percent of the previous month's oversold outstanding foreign exchange bills bought or US$5 million, whichever is higher.

6.9 Exports, barring a few items which require licenses, are freely allowed and proceeds arising from them are to be surrendered as mentioned above. This also holds true in regard to invisible receipts (with some exceptions). Korean residents are permitted to retain up to US$5,000 in foreign exchange. Non-residents are allowed to convert freely foreign exchange into domestic currency.

6.10 All imports need licenses under the ITA, though they are issued upon application almost automatically. Imports are divided into two categories: automatic approval and restricted items. The latter comprises only 278 items out of a total of 10,274 items on the Harmonized System, or only 2 percent of imports. All payments for invisibles require an individual license. Payments for invisibles connected with foreign trade and for certain other items such as banking charges, insurance premiums and communication fees are licensed automatically. Korean companies are authorized to obtain foreign exchange to meet the expenses of their overseas operations. Residents travelling abroad can carry US$5,000 per trip in addition to exchange for other specified expenses. Credit cards are permitted in designated transactions. On the whole, restrictions on invisible payments are relatively few.

6.11 Thus it can be seen that current account transactions in Korea are generally free from any serious restrictions, which explains Korean acceptance of Article VIII obligations under the IMF Agreement. The residual

restrictions are more precautionary than prohibitive in nature, enabling the regulatory authorities to monitor external transactions.

6.12 Both non-residents and Korean residents (as mentioned earlier) can hold foreign currency accounts with foreign exchange banks. Remittances from non-resident accounts and withdrawals in the form of currency notes upon departure from Korea may, in general, be made freely. The approval of the bank where the account is held is not required for remittances abroad or transfers to other foreign currency accounts for purchases and withdrawals of foreign means of payment or for payments relating to approved transactions. The sale of foreign currency from deposits for domestic means of payments has been unrestricted since December 1991.

6.13 The resident holders of foreign currency accounts do not encounter as many restrictions in regard to opening such accounts, but withdrawals from such accounts are subject to certain requirements. Residents, while free to change the composition of currencies in such accounts, can use them only for conversion into Won, making payments in foreign currency or buying other foreign currencies to deposit in the accounts.

6.14 Foreign exchange banks can grant foreign currency loans for certain purposes, such as the import of production facilities, repayment of the principal of foreign loans or overseas direct investment. Until January 7, 1993, there were restrictions on the maximum amount of such loans, with the limit varying according to the size and nature of borrowing. In the case of loans for repayment of a foreign currency loan, the maximum repayment period is three years, and eight years in regard to other loans.

Capital Account Transactions

6.15 Transactions in the capital account of the Korean balance of payments are governed by two Acts--FEMA and FCIA--depending upon whether they are inward or outward transactions. In general, all outward foreign exchange transactions and inward portfolio investment and short-term borrowing come under the purview of the FEMA, and the rest are covered by the FCIA. Looking at it somewhat differently, all the short-term capital flows and the outward foreign direct portfolio and other long-term loans are regulated by the FEMA. Over the years, but particularly since 1981, the restrictions on capital accounts were diluted a great deal; capital transactions are subject to the discretion of the MOF or the BOK, or both.

6.16 No loans and overseas investments, whether direct investment or portfolio, are subject to prior approval of the relevant authorities. Loans can be provided to entities outside Korea, but only to banking institutions. All inward flows of funds likewise require approval of the authorities.

6.17 Until December 31, 1991, portfolio investment in domestic securities by non-residents was restricted only to funds such as the Korean Fund and matching funds. Such investment in Korea amounted to about US$700 million by end-1990. Convertible bonds and bonds with warrants of major Korean companies have been issued since 1985, a fact which smoothed the way for foreign participation in domestic portfolio investment. The liberalization of capital transactions is being carried out cautiously to

prevent large and volatile capital flows from creating a high degree of instability in the foreign exchange and capital markets. In accordance with the 1982-92 internationalization plan, Korean authorities have allowed direct transactions among foreigners of Korean stocks acquired though equity-related bonds and the creation of three matching equity funds to promote equity inflows and outflows. Furthermore, the limit on foreign shareholding in domestic securities has been relaxed, and a greater number of foreign securities companies have been allowed to open representative offices in Korea, a move which suggests perhaps a greater scope for foreign investors to invest more easily in the Korean securities market in years ahead.

6.18 Starting January 1, 1992, direct foreign portfolio investment in the Korean market was allowed, subject to some restrictions. Investment in an individual security is limited to 3 percent of outstanding shares and the cumulative limit on foreign ownership in a single security is 10 percent, except for the companies which have issued convertible bonds. In these cases, a higher limit of 25 percent is permitted (see Chapter VIII). Overseas portfolio investment is not generally allowed for residents other than institutional investors such as securities companies, investment trusts and insurance companies. However, the limits which are set on such investments vary according to the nature of the business of the institutional investors.

6.19 There has been considerable liberalization in regard to direct foreign investment since 1984. Such investment is now allowed in all industries, except those specified in a "negative list". Prior to this, direct investment was allowed only in those industries which were included in a positive list, and as such was largely restrictive. As of the end of April 1991, the negative list consisted of 206 out of a total of 999 industrial sectors, thus implying a liberalization ratio of 79.4 percent. The negative list is divided into two parts: prohibited and restricted. In the former category fall the activities reserved exclusively for the Government or public entities as well as those considered hazardous to public health. Restricted activities are not, in general, open to foreign investment, but specific projects may be approved on a case-by-case basis.

6.20 Since March 1991, a simplified procedure was introduced for the approval of foreign direct investment under new procedures called a notification system. Application for foreign investment is subject to approval or notification requirement. If it is notification, a foreign firm can start business 30 days after the date of submission of notification, unless its notification is not approved. It is the goal of the authorities to extend, by 1993, the notification procedure gradually to cover all industries barring a few; investment approval is normally granted within 30 days. The overseas remittances of dividends and legitimate profits accrued from stocks or shares owned by a foreign investor are freely permitted, and so is the repatriation of profits.

6.21 As for the residents wishing to invest abroad, they must obtain the approval by the BOK, which is often granted as a matter of course. Where the amount of the individual investment is not more than US$5 million, such authorization is automatic. From January 1989, the old positive list was changed to a negative list, which encouraged, to a considerable extent, overseas investment by Korean companies. Despite all of these liberalization measures, the capital account is still not free from discretionary control, which is informally, if not formally, exercised.

Foreign Exchange Market

6.22 The main players in the foreign exchange market, with the existing semi-liberalized foreign exchange and financial system, are the foreign exchange banks, their customers, and the BOK--the last one playing the central role because the foreign exchange is concentrated there. The bank customers, being engaged in trade, are the suppliers of foreign exchange and its final users. They are involved in the purchase and sale of foreign exchange against domestic currency or other foreign currencies, and the management of foreign exchange risk. The foreign exchange banks are the main intermediaries through which the foreign exchange transactions take place. They deal among themselves and with foreign banks in other countries in regard to the purchase and sale of foreign exchange and maintain, at the end of every day of transactions, the foreign exchange position in a manner stipulated by the BOK. A major part of inter-bank transactions is matched at the Fund Brokerage House in the Korea Financial Telecommunication and Clearings Institute (KFTC), in which all foreign exchange banks are members. The residual positions are negotiated through the inter-bank telephone market. The BOK, in its capacity as the custodian of foreign exchange, intervenes to balance the supply of and demand for foreign exchange, and also to manage reserve holdings.

6.23 Spot transactions predominate in the foreign exchange market, though their proportion in total transactions has been declining in recent years. Foreign exchange forward contracts and interest rate swaps were introduced between 1980 and 1984. Some other instruments such as currency options and swaps were initiated in 1987 to meet the growing need for advanced hedging against future risk, unavoidable in a foreign exchange market. Such transactions are currently limited, partly because of the limited familiarity of the market players with these instruments in Korea (which was until recently a closed economy) and partly due to restrictions by the authorities to prevent speculation and to ensure sound business administration. Inter-bank transactions are free from all restrictions.

6.24 A foreign currency US dollar call market was established in 1989 with minimum transactions of US$100,000 as a complement to expanding domestic money markets; this market was extended to cover Yen in 1991 and DM in 1992, with minimum transactions of Yen 10 million and DM 100,000, respectively. This market, where short-term foreign funds are borrowed and lent without collateral, consists of national commercial banks, specialized banks, regional banks, merchant banking corporations, and foreign bank branches. The KFTC acts as an intermediary in the foreign currency call market. The maturity of lending and/or borrowing is basically short-term, ranging from overnight to one year. Transactions are in US dollars and the minimum amount of transactions is US$50,000. Foreign currency call money (i.e., borrowing) and loan rates are linked to interest rates in the international financial market, adjusted of course for the exchange rates. There is presently no brokerage fee.

6.25 The most dominant players in the foreign currency call market are presently national commercial banks, regional banks, specialized banks and merchant banks, accounting for 13.3 percent, 79.1 percent, 4.2 percent, and 3.0 percent, respectively, of the call loans as of August 1992, and 64.5 percent, 18.2 percent 11.3 percent and 5.7 percent, respectively, in the call money market. Foreign banks and foreign bank branches are not fund lenders in

the market. The market grew rapidly in the first five months following its inception, as evident from the fact that the magnitude of transactions in the market increased from US$907 million in December 1989 to US$6.2 billion by April 1990.

Table 6.1: Korea - Structure of Foreign Currency Call Market, July - August, 1992
(Millions of US$, Percent)

	Call Loan (A)		Call Money (B)		(A-B)	
	July	Aug.	July	Aug.	July	Aug.
Nationwide Commercial Banks	614.3 (13.1)	366.5 (13.3)	3524.2 (75.2)	1783.9 (64.5)	2909.9	1417.4
Specialized Banks	3751.1 (80.0)	2187.3 (79.1)	214.3 (4.6)	313.0 (11.3)	3536.8	1874.3
Regional Banks	185.7 (4.0)	115.5 (4.2)	733.7 (15.7)	504.2 (18.2)	548.0	388.7
Merchant Banking Corporation	50.3 (1.1)	82.3 (3.0)	193.7 (4.1)	157.8 (5.7)	143.4	75.5
Foreign Bank Branches	87.8 (1.9)	13.1 (0.5)	23.3 (0.5)	5.8 (0.2)	64.5	7.3
Total	4689.2 (100.0)	2764.7 (100.0)	4689.2 (100.0)	2764.7 (100.0)		

Note: Figures in parentheses indicate the share of transactions.
Source: Ministry of Finance.

Exchange Rate Determination

6.26 In a freely functioning foreign exchange market, the exchange rate is expected to be determined by the supply of and demand for foreign exchange. However, Korea has not reached that stage yet, though it has moved in the direction of a market determined exchange rate since 1990. Until 1990, the exchange rate, as a signal of market conditions in the foreign exchange market, was determined by the MCF and the BOK on the basis of an SDR-related basket of currencies which sought to reflect market conditions. The inter-bank foreign exchange market became a vehicle for determining the price of foreign exchange on the basis of market forces. In view of these previous actions, and with the avowed objective to progress toward a market mechanism, Korean authorities made a switch from the earlier system of exchange rate

determination to a system mostly if not wholly, reflective of market conditions. This new system allowed for a freely determined exchange rate in the inter-bank foreign exchange market and other exchange rates which are related, directly or indirectly, to the exchange rate prevailing in that market.

6.27 Under a new system called a market average exchange rate, the KFTC informs the MOF, the BOK and the foreign exchange banks of the basic exchange rate of the Korean Won against the US dollar, which is derived from weighing average inter-bank won/dollar exchange rates applied in spot transactions on the previous business day. Since it is based on the freely determined inter-bank exchange rates, it approximates the market rate and thus changes every day, depending upon prevailing market conditions. However, since it is the starting rate for the day, its market element is somewhat diminished. The basic rate on the market average rate is applied by the BOK in its transactions with the Foreign Exchange Stabilization Fund and the Government. The BOK's buying and selling rates for US dollars as applied to banks (telegraphic transfer rates) are determined by the BOK. There are other rates which are determined through negotiations between each foreign exchange bank and the customers.

6.28 The exchange rate system that emerged from the new arrangements is a cross between a fixed exchange rate regime and a floating or managed float regime. It is analogous to the fixed exchange rate in as much as its current value on any one day is based on the weighted average of the previous day's inter-bank exchange rates. It has a floating element to the extent that the rates on which it is based are determined in the market, and these fluctuate with the day-to-day changes in the demand and supply of foreign exchange.

C. A Case for Liberalization of the Capital Account

6.29 The question of liberalization of the capital account usually centers on two issues. The first is whether a capital account freeing should coincide with, precede, or follow the current account liberalization, and the second is concerned with how it should be phased relative to the liberalization of the domestic financial system. Current account liberalization generally involves a real depreciation of the exchange rate which counterbalances the negative effects on the balance of payments of tearing down the tariff walls. This, however, is a non-issue in Korea because the current account has become substantially liberalized in recent years, as detailed in the earlier section of this chapter. It is the second issue of capital account liberalization that needs to be addressed in detail.

6.30 There is an inherent bias against freeing the capital account in countries which had repressed economies in the past, as Korea once had. This is because the Government in such an economy finances fiscal deficits by taxing their financial systems by instruments such as reserve requirements and directed credits. Since taxation depresses yields on bank deposits, depositors tend to substitute foreign financial assets with higher yields for domestic currency denominated assets. Even the borrowers, who have to pay higher rates on loans, try to avoid the tax by seeking cheaper loans abroad--and to the extent this happens, the domestic financial system shrivels with the consequent fall in tax revenue. Hence, such economies have imposed severe

restrictions on the movement of short-term capital. Although Korea outgrew that stage long ago, the psychological barriers to removing short-term capital controls remain, which is why the authorities are reluctant to contemplate any relaxation of capital controls.

6.31 The Korean authorities are haunted by their experience of capital account liberalization in the mid-1960s, when Korea launched its first great experiment of financial reform. As interest rates were moved to higher grounds, and the exchange rate was sufficiently depreciated, the expectation of profitability of investing in Korea soared. As a result, there was a large amount of capital inflow in the aftermath of financial reform. Korean borrowers also were encouraged to increase their foreign indebtedness, as they could raise foreign loans almost at a flat rate of interest during that period when the Government guaranteed virtually all credit flows. The foreign liabilities of the Korean private sector were mainly of a short-term nature, while they typically financed long-term projects. However, the repayment of short-term overseas credit coincided with the appreciation of the exchange rate induced by capital inflow, which adversely affected export earnings. This episode may have been a consideration behind the inclusion of capital account liberalization in the blueprint for financial reform at a later stage.

6.32 It has to be borne in mind that Korea's capital account, as described earlier, has been liberalized steadily since 1985, though in small steps and only to a limited extent. The existing quantitative studies undertaken by KDI support this. These studies also found that Korea's regulated interest rates have responded, albeit to a limit extent, to the foreign interest rate changes during the latter half of the 1980s.

6.33 A standard economic case for capital account liberalization is made on the grounds that inflows of foreign capital into the hitherto repressed economy depress the domestic interest rates which remain high prior to liberalization and encourage foreign borrowing by the domestic sector at the lower interest rates. Initially, a fall in domestic interest rates raises domestic demand, and thus prices, and as a consequence the real exchange rate begins to appreciate, leading to a widening of the current account deficit. Over time, however, the adverse balance of payments results in decreases in expenditure and wealth, with the real exchange rate declining to the initial level. In the asset markets, the fall in domestic interest rates raises the demand for money which is met by domestic market participants borrowing abroad to convert the foreign market into domestic money supply.

6.34 In the context of financial market deregulation, a case for freeing the capital account rests on the premise that the domestic financial market, which will be free after deregulation, will have to be integrated with foreign financial markets if the purpose of liberalization is to be achieved. Finance is fungible and it flows to where the reward is highest and the cost of transactions is lowest. This condition is fulfilled only when the domestic financial market is linked to the international financial market.

6.35 The experiences in liberalizing countries, however, did not always conform to the textbook version effects of capital account liberalization. The Southern Cone countries such as Chile, Argentina and Uruguay, for example, demonstrated that domestic interest rates, far from declining after capital account liberalization, actually increased, leading to bankruptcies of the weak industries and financial institutions, a fall in output and an upsurge in

unemployment. There were many explanations provided for these Southern Cone experiences. For one thing, the prevalence of macroeconomic imbalances in these countries raised expectations of devaluation of the appreciated exchange rate, which brought about the rise in domestic interest rates. Second, the high domestic interest rates reflected the transaction cost which remained high because banks could not arbitrate directly between domestic and foreign assets. Third, the oligopolistic structure of the banking system (particularly in Chile) and market imperfections accounted for the high level of domestic interest rates. With financial liberalization including capital account at full steam, industrial and trading firms closely linked with financial institutions constantly exerted fierce pressure on the banks to appropriate ever larger shares of credit to financing these activities. This raised credit demand and hence interest rates. Fourth, distress borrowing was widely prevalent, inducing firms to borrow under financial stress and severe cash-flow problems at any interest rate rather than sell assets to meet losses.[2/]

6.36 The experiences of other countries thus do not provide any guidance as to which course of action Korea should adopt. Whatever Korea does has to be related to the specificity of the Korean economic situation. An argument often voiced in Korean official circles, and generally taken as valid, is that the removal of capital controls during the impending financial reforms will lead to the appreciation of the exchange rate, thus impeding exports and raising domestic liquidity. This would then accentuate inflationary pressures, but without much impact on high domestic interest rates in view of the prevailing inelastic demand for bank credit. However, in the present context, these are not likely to be the consequences. Korea currently has an inflation rate of about 7 percent, with a GNP growth rate of around 7 percent. The fiscal deficit is modest at 1.4 percent of GNP, the external deficit is around 2 percent of GNP, and exports are growing at a rate of 8-9 percent (though this is lower than during 1987-89). The unemployment rate is less than 2 percent, and inflationary pressures during the last few years have emanated mainly from higher wage demands.

6.37 If the capital account were completely freed in the above mentioned circumstances, it should have (if at all), a beneficial impact on Korean growth. With the increased inflow of capital, the Won, which has been depreciating in the last two years under the new market-oriented exchange rate system, would initially appreciate. At a time when exports are expected to rise from their present low level, the initial impact would admittedly be adverse. However, it need not be so, as the appreciated exchange rate will lead to a fall in the level of inflationary pressures insofar as the cost of imports on which Korean investment and consumption is significantly dependent will decline too. To the extent inflation is moderated, inflationary expectations will be dampened, leading to a decline in nominal and real interest rates in the domestic financial markets. Thus, what will be lost by exporters through appreciation of the exchange rates will be compensated by lower interest rates. Even the money supply effects of increased capital inflow seem exaggerated. With the capital inflow, the money supply will initially rise, but second round effects would be healthy with the restoration

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2/ Y. J. Cho and Deena Khatkhate, "Lessons from Financial Liberalization in Asia: A Comparative Study," Economic Discussion Paper No. 50, World Bank, 1989.

of the money supply to its initial level once the exchange rate has appreciated.

6.38 But the most significant impact of the increased capital inflow would be reflected in the rate of growth of output. Considering that the unemployment rate has reached the minimum possible level (i.e., 2 percent), output growth can be maintained if labor productivity is raised, which is possible only with a switch from labor intensive techniques of production to more capital intensive techniques. Korea can achieve this switch with the import of cheaper capital goods embodying new technologies. With new output and its pattern, it would be a short leap to increased exports in new lines. In this scenario, the Korean economy will not be able to rid itself of the external deficit for some time. But such a deficit need not cause serious concern to the authorities in a rapidly changing and more sophisticated Korean economy so long as that deficit remains sustainable enough to be financed by normal capital inflows. The Korean economy has reached a stage in which capital inflows to finance new long-term investment need to be encouraged so long as the interest paid on them is equal to or less than the rate of return earned on their use in domestic investment. If the authorities feel the need to reverse the flows in one way or the other, they will be able to do so with the new instruments of macroeconomic policy at their disposal, such as the flexible use of exchange and interest rates made possible by the liberalization of the financial sector and the capital account.

6.39 This a priori reasoning seems to have some support from empirical results relating to the impact of capital flows on the Korean economy.[3/] With capital account opening, both GNP and inflation are expected to increase and the interest rates are expected to decline in the initial stages. However, these results should not be taken as definitive; they are more indicative of the direction of impacts of the opening of the capital account on the Korean economy.

D. The Preconditions for Capital Account Liberalization

6.40 Though there is a strong case for capital account liberalization, it is pertinent to deal with the question of whether the present environment is congenial for taking this step on the basis of experience and economic reasoning. It is necessary to meet two preconditions before embarking on capital account liberalization. First, there should be macroeconomic stability since opening the capital account increases the opportunity for currency substitutes, which increase inflation rates in terms of domestic currency. When this occurs, the domestic currency money base shrinks while the foreign component of the base increases. A sustainable fiscal deficit requiring a minimal inflation tax is necessary.

6.41 If the nation has to have easy and free access to the international financial markets, which is what freeing the capital account means, it is essential that the domestic banking system must not be overburdened with rules and regulations on interest rates or loan portfolio

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3/ Korea Development Institute, "Foreign Exchange and Capital Account Transactions," August 1992.

composition, which would make them uncompetitive relative to foreign banks operating in the country. Besides, the domestic banks must have independent management and sound portfolios--no large proportion of non-performing loans. If these two preconditions are not met, the removal of controls on capital accounts may lead to domestic financial disintermediation and also to a banking crisis, which would need to be addressed by the Government.

6.42 On this criteria, the gravity of evidence is ambiguous as to whether or not Korea should free the capital account at one go at the present juncture. The first of the preconditions for freeing the capital account is currently met by Korea. There is currently no serious macroeconomic imbalance in the Korean economy with the current account deficit tending to narrow and the interest rate falling. More importantly, the fiscal deficit interpreted in a broad way as the apparent deficit of the Government and hidden through the BOK is at a sustainable level. On other hand, the domestic banking system is overburdened by a variety of regulations, and the level of profitability is low due to the large amount of below market policy loans. Furthermore, some government banks also reportedly have sizeable non-performing loans. This means the banking system in Korea will not be in a position to compete with international banks on a level playing field and perhaps the complete liberalization of the capital account will have to wait until the financial system liberalization process is through.

6.43 A gradual approach towards capital account liberalization is also dictated by the experiences of Japan and other OECD countries. The capital account controls in these countries were strongly influenced by the objectives of balance of payments, exchange rate variations, and the emergence of monetary management. They tailored the removal of capital controls accordingly, as balance of payments changed from worse or better and raised the barrier in the former case and lowered it in the latter. They also synchronized the phasing out of controls on the capital account with the movement of capital flows, particularly of a short-term nature so as not to disturb domestic economic balances. Naturally, therefore, capital account deregulation occurred over a longer time and in small doses.

6.44 The second best policy if it were decided that fully opening of the capital account was not feasible, would be to begin by removing restrictions on the inflow of foreign capital in the government securities, especially short-term bonds. This will have the advantage of beefing up the domestic bond market so that a secondary market would develop apart from providing ammunition to the central bank to use those bonds for open market operations, as an indirect monetary policy instrument (see Chapter IV). A complete freeing of the bond market can be postponed until the domestic banking system is unshackled from restrictive requirements which is scheduled for the late 1990s.

E. Summary and Recommendations

6.45 The current account of the Korean balance of payments has been gradually liberalized during the 1980s, and it is now generally free from any serious restrictions, which accounts for Korean acceptance of Article VIII obligations under the IMF Agreement. The residual restrictions are more precautionary than prohibitive in nature, enabling the Korean foreign exchange

regulatory authorities to monitor external transactions. Both non-residents and residents can hold foreign currency accounts with foreign exchange banks, though the latter's withdrawal from these accounts is subject to certain prior requirements.

6.46 The capital account of the balance of payments, though made freer than before in recent years, has been subject to several restrictions (both formal and informal) over the years, but particularly since 1981, the restrictions on capital account were diluted a great deal. It is generally subject to the discretion of the MOF and the BOK, or both.

6.47 A foreign exchange market has developed since 1989 with minimum transactions of US$100,000 as a complement to the expanding domestic money market; this market was extended to cover Yen in 1991 and DM in 1992, with minimum transactions ₩ 10 million and DM 100,000, respectively. The market where short-term foreign funds are borrowed and lent without collateral consists of national commercial banks, specialized banks, regional banks, merchant banking corporations, and foreign bank branches. The KFTC acts as an intermediary in this market. The BOK plays a central role because the foreign exchange is concentrated there. The foreign exchange market was strengthened in recent years by the modification of the exchange rate determination system, which is a cross between a fixed exchange rate regime and a floating or managed float regime. It is analogous to the fixed exchange rate in as much as its current value on any one day is based on the weighted average of the previous day's inter-bank exchange rates; it has a floating element to the extent that the rules on which it is based are determined in the market, and these fluctuate with the day-to-day changes in the demand and supply of foreign exchange.

6.48 Though in general there is a case for capital account liberalization, Korea will have to adopt its own approach to this problem. There are two conditions precedent to embarking on capital account liberalization. First, there should be a macroeconomic balance. Second, opening the capital account renders access to the international financial market easier and freer, and for that reason, it is essential that the domestic banking system must not be overburdened with rules and regulations on interest rates or loan portfolio composition, which would make them uncompetitive relative to foreign banks operating in the country. Korea fulfills the first condition of macroeconomic stability, while it is far from fulfilling the second condition of having a competitive banking system.

6.49 It is therefore recommended that the opening of the capital account is to start by removing controls on the inflow of foreign capital in government securities, especially short-term bonds. This will have the advantage of beefing up the domestic bond market so that a secondary market could develop. A complete freeing of the bond market can be contemplated when the domestic banking system is fully deregulated. In other words, the approach to capital account liberalization should be gradual.

VII. BANK SUPERVISION AND REGULATORY FRAMEWORK

Introduction

7.1 The financial sector in Korea has undergone rapid change in the 1980s. Unlike many developing countries, where the banking sector dominates the provision of funds to the domestic non-financial sectors of the economy, the rapid growth of the securities markets in Korea, as well as the growth of non-banks, has transformed the flow of funds in the economy (Table 7.1).

Table 7.1: Korea - Sources of Funds of the Domestic Non-financial Sector, 1970-91
(Percent)

	1970-74	1980-84	1989	1991
Financial Institutions	38.0	45.6	48.3	57.3
Banks	29.2	23.2	15.6	22.5
Non-Banks	8.8	22.4	32.7	34.8
Securities Markets	11.1	20.0	39.9	26.5
Stocks	9.7	11.9	14.9	7.1
Bonds & CP	1.3	8.1	18.1	15.2
Foreign borrowing	13.5	6.0	-1.5	2.7
Others /a	36.9	25.2	13.4	13.5
TOTAL	100.0	100.0	100.0	100.0

/a Includes trade credit, government loans, etc.

Source: Bank of Korea.

7.2 The rapid changes in the financial sector, together with the attainment of economic maturity as Korea approaches OECD status, warrant a changing role for the supervision and regulation of the financial sector. This chapter proposes to examine three related questions: (i) Is the present legal and supervisory framework appropriate for the changing Korean financial sector? (ii) What are the implications of the proposed financial sector liberalization on the solvency and safety of the financial sector? (iii) What are the recommended changes to the regulatory and supervisory framework that would encourage the growth of a dynamic and yet stable financial system that is responsive to the needs of the country?

A. Legal and Regulatory Framework

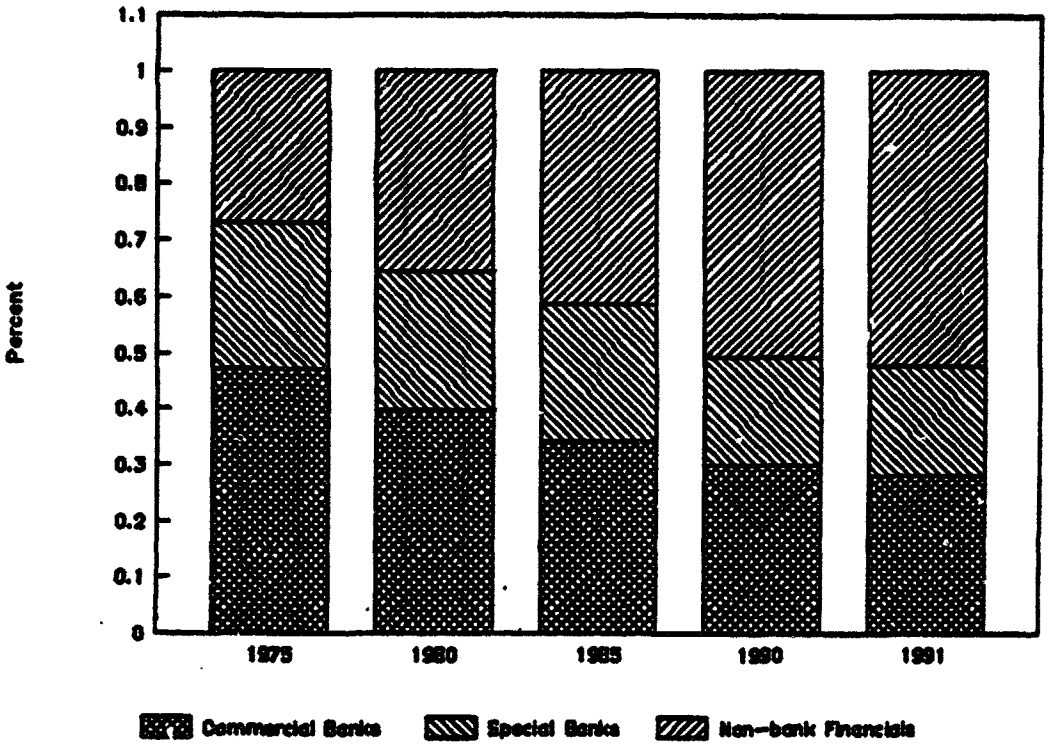
7.3 The legal and regulatory framework of Korea is embodied in a series of laws and regulations that have been extensively amended over a period of time. The two key pieces of legislation are the Bank of Korea Act and the General Banking Act of 1950. The Bank of Korea Act established the Monetary Board and the Office of Bank Supervision and Examination (OBS) located in the Bank of Korea (BOK). The OBS is responsible for the examination of the business condition of the each banking institution at least once a year. The banking institutions under the purview of the BOK comprise the banks established under the General Banking Act, as well as the National Agricultural Cooperatives Federation, the National Federation of Fisheries Cooperatives, and the National Livestock Cooperatives Federation.

7.4 As new financial institutions appeared, however, their establishment was promulgated under separate legislation, with supervision delegated mostly to the Ministry of Finance (MOF), so that supervision has been dichotomized between the BOK and the MOF. The four specialized banks which were created under statute, the Citizens National Bank (CNB), the Industrial Bank of Korea (IBK), the Korea Housing Bank (KHB), and the Korea Development Bank (KDB) are required by law to be audited by the Bureau of Audit & Inspection, which has delegated the inspection work to the OBS.

7.5 The NBFIs grew rapidly in the 1970s with the promulgation of the Short-term Financing Business Act of 1972, which legitimized the growing curb market and created licensed finance and investment companies. These institutions are regulated by the MOF, although examination work (but not supervision) has been delegated to the OBS. Similarly, mutual savings & finance companies were legitimized under the Mutual Savings and Finance Company Act 1972 to absorb small-scale curb market money. The Credit Union Act of 1972 also licensed credit unions which grew up in offices, churches and other private groups. The Saemaul (New Community) Finance Association is another type of rural cooperatives savings institution which came under the regulation of the New Community Finance Association Act of 1983. These institutions are all under the supervision of the MOF.

7.6 The dichotomy of supervision is more clearly shown by the sharp inroads which the NBFIs have made in the financial sector. By June 1992, they accounted for W 162.5 trillion in deposits, compared with M2 of W 86.2 trillion. The total market share of the commercial banks has fallen from nearly half to just over one-quarter between 1975-91, while the market share of NBFIs has risen from one-quarter to more than half (Chart 7.1). The rapid growth has been particularly spectacular in the savings institutions, such as short-term finance companies, mutual credits, and mutual savings & finance companies, which are under the supervision of the MOF. While the monetary institutions' credit to the private sector has been growing at an average annual rate of 19.5 percent, the NBFIs have been increasing their loans at an annual rate of 28.7 percent, fuelled largely by their freedom to offer higher deposit rates and to charge higher lending rates.

Chart 7.1: Korea - Share of Loans and Discounts by Banks and Non-banks, 1975-91
(Percent)



Source: Bank of Korea.

7.7 Indeed, the supervisory structure (Table 7.2) over the Korean financial system has been divided[1]/ into three parts with progressively weaker central regulation and control:

(i) The banking system and securities market which are directly under the central bank and/or MOF, with "control by the MOF beyond the mere monitoring and supervisory functions usually exercised by the official bodies and has included allocation of financial resources and setting of interest rates";

(ii) The NBFIs which are generally not subject to as many controls from the MOF; and

(iii) A completely unregulated "curb" market which has always been an important source of finance for enterprises unable to gain access to the more recognized institutions.

1/ OECD, "Financial Systems and Financial Regulation in Dynamic Asian Economics," Financial Trends, 1991.

Table 7.2: Korea - Supervisory Jurisdiction of Financial Sector

Financial Institutions	Supervised by	Examined by
General Banks (National, Regional & Foreign Banks)	Superintendent of Banks	Superintendent of Banks
Specialized Banks (IBK, CNB, KHB, KDB)	Ministry of Finance	Board of Audit & Inspection Superintendent of Banks
Non-Bank Financial Institutions (DFIs, Investment Companies, Savings Institutions except Postal Savings)	Ministry of Finance	Board of Audit & Inspection Ministry of Finance Superintendent of Banks
Other Non-bank Financial Institutions (KCGF, KRC, etc.)	Ministry of Finance	Superintendent of Banks
Securities Institutions (Securities Companies, Investment Trust Companies, KSFC)	Ministry of Finance	Securities Supervisory Board
Insurance Companies (Life Insurance and Non-life Insurance Companies)	Ministry of Finance Insurancy Supervisory Board	Insurance Supervisory Board

Source: Office of Superintendent of Banks.

7.8 The historical rationale for the tight supervision over the official financial sector (other than the curb market) was the "conventional wisdom" that it was necessary for the Government to intervene in the operation of the banking system to ensure the channelling of limited financial resources to priority sectors such as exports and basic industries. The tertiary or service industry received the least emphasis, being regarded as "non-productive" or "non-essential".[2/]

7.9 The precedence of industrial policy over financial development was embodied in the amendments to the Bank of Korea Act in 1962, which enabled the Minister of Finance to request reconsideration of resolutions adopted by the Monetary Board. Official supervision over the growing curb market in the 1960s culminated in the August 1972 Presidential Decree which froze the curb market and required curb market creditors to swap debt for equity in firms.

2/ Nam Duck Woo, "Korea's Economic Take-off in Retrospective," Second Washington Conference of the Korea-American Economic Association, September 28-29, 1992.

In addition, the establishment of short-term finance companies "officialized" most of the curb market under the Short-term Finance Business Act, 1972. Nevertheless, an interesting dichotomy has arisen in the Korean financial system: the "monetary" institutions regulated by the BOK (through the OBS) on the one hand, and a growing group of NBFIs with lower economic regulations under the purview of the MOF on the other. A legitimate question to ask is whether it is healthy for the financial system to develop and be supervised in this dichomotized manner?

Supervision over Monetary Institutions

7.10 The legal framework for the supervision of banking institutions, under the charge of the OBS is quite comprehensive. In 1991, the General Banking Act, the Industrial Bank of Korea Act, and the Long Term Credit Bank Act were amended, and the Act concerning the Merger and Conversion of Financial Institutions was promulgated.

7.11 The major amendments to the General Banking Act concerned the following:

- Improving autonomy in management of banks. Raised ceiling on investment of stocks and securities with maturities exceeding 3 years and allowed issue of debentures up to 5 times equity.
- Improving supervision & capital adequacy. Banks are required to maintain minimum liquidity and capital adequacy ratios, and the Monetary Board is now empowered to limit business of problem banks and to suspend repayments of part or all of deposit liabilities.
- Consumer protection. Established a Financial Disputes Office within the OBS.
- Limits on lending to subsidiaries.
- Clarified supervision over foreign banks.

7.12 Other major amendments to the Industrial Bank of Korea Act and the Long Term Credit Bank Act were aimed at increasing their capital and to improve their capacity to intermediate in their development activities. The most significant legislation enacted during 1991 was the Merger and Conversion of Financial Institutions Act, which facilitated the merger or conversion of NBFIs. In March 1991, five investment and finance companies converted into securities companies, two merged and became Boram Bank, while one converted into Hana Bank.

Supervisory Capacity

7.13 The OBS currently has 700 staff, of which about 200 are examiners. The Superintendent is supported by one Deputy Superintendent and three Assistant Superintendents, with eleven departments. There are six examination departments, one Examination Controlling Department and departments involved in Banking Improvement, Credit Supervision, Bank Supervision (research and

policy formulation), and a General Affairs Department. The efficiency and capacity of the OBS is very high by international standards. Commercial banks have very detailed reporting requirements under the GBA, and the OBS not only inspects them at least once a year, but also conducts two surprise visits annually. The OBS has recently issued comprehensive guidelines on management for banking institutions, geared towards increasing the efficiency of bank management.

Major Prudential Regulations

7.14 The General Banking Act, strengthened by a series of regulations issued under Presidential decrees, imposes supervisory regulations that conform broadly to international standards, and are certainly enforced very rigorously.

7.15 Capital Adequacy. Korean banks are required to maintain capital and reserves equal to a minimum of 5 percent of their total liabilities, including guarantees or assumed obligations. To increase their capital base, banks must transfer a minimum of 10 percent of their net profit to reserves until they equal total paid-in capital. Korean banks are expected to comply with BIS capital adequacy standards of 7.25 percent of risk-weighted assets by end-1993, and of 8 percent by end-1996. Only two domestic banks were unable to comply with BIS standards in 1992.

7.16 Liquidity. Korean banks are required to maintain minimum reserve requirements against deposit liabilities, this being 11.5 percent for domestic currency deposits of less than 2 years maturity, and 8 percent for time deposits of maturities more than 2 years. Foreign currency deposits also attract a reserve requirement of 11.5 percent for resident accounts, and 1 percent for non-resident accounts. The OBS monitors the loans/deposit ratios carefully, and banks may not invest more than 100 percent of their equity capital in stocks, bonds and other securities of more than 3 years maturity. The OBS is encouraging the banks to improve their asset/liability management, and to monitor their interest rate, exchange rate, and maturity risks.

7.17 Credit Restrictions. Korean banks are subject to several credit restrictions. The main ones are:

(i) Single customer loans in excess of 20 percent of the bank's net worth, except government agencies, or those approved by the OBS;

(ii) Guarantees & assumption of obligations in excess of 40 percent of net worth, with exceptions as in (i);

(iii) Granting loans, directly or indirectly, on pledge of own shares, or pledge of shares more than 20 percent of issued shares of non-banks;

(iv) Possession of real estate, except for banking operations, limited to 100 percent of net worth. Real estate acquired from defaulted loans should be disposed of quickly, subject to approval of OBS;

(v) Purchase of shares in excess of 10 percent of the shares issued by any non-bank;

(vi) Loans for speculation in commodities or securities;

(vii) Loans to buy the bank's shares;

(viii) Loans to the bank's officers or employees, except petty loans;

(ix) Loans for non-essential or luxury-oriented activities; and

(x) Loans to finance, directly or indirectly, political activities.

7.18 Small and Medium Enterprise (SME) loans. Nationwide banks are expected to extend 35 percent of their increase in domestic deposits to finance SMEs; regional banks have to extend 80 percent. Foreign banks that seek rediscount facilities from the BOK have to comply at the 35 percent level, while those that do not need comply only at the 25 percent level.

Supervision over Non-Bank Financial Intermediaries

7.19 The MOF has fairly wide powers over the operations of the NBFIs, although economic regulations over these institutions are substantially more relaxed than over the banking system. Very similar prudential guidelines are imposed on the NBFIs. Short-term finance companies must have a liabilities/capital ratio of 15 times capital base, as against 10 times for merchant banks, and 20 times for general banks. Short-term finance companies are also subject to single customer credit limits of 25 percent of their capital base, and are barred from owning real estate except for their own operational purposes.

7.20 The laws regulating the operations of these NBFIs are all sufficiently broad to allow the MOF to approve or disapprove any changes in business operations (such as branching, merger or sale of part or all of the business) and for the MOF to pass any rules to enforce the laws by Presidential Decree. Furthermore, the MOF may inspect any of these institutions or delegate such powers to the Superintendent of Banks. If any NBFIs were to violate the provisions of the law, or their property condition and management was unsound, thus harming the public interest, the MOF may suspend all or part of their business. Short-term finance companies also participate in a voluntary deposit insurance scheme.

7.21 In conclusion, therefore, the legislative framework appears to provide sufficient powers to the Korean authorities to ensure that the financial institutions operate in a sound and safe manner. As the bank-centered Korean financial system broadens with newer NBFIs and the deepening of the securities market, the laws have been adequately amended to ensure strong guidance over the system as a whole. Table 7.3 shows that new institutions and new instruments have indeed broadened and deepened the financial institutions significantly in the second half of the 1980s. The market capitalization and amount outstanding of the stock and bond markets, which amounted to only 5.6 percent and 10 percent, respectively, of total assets of the financial system in 1986, had increased significantly to 13.8

percent and 14.5 percent, respectively, by the end of 1991. The Korean financial system can no longer be termed a bank-dominated system.

7.22 An interesting development over the last five years (1986-91) is that while the capital asset ratios of the deposit money banks have improved from 3.3 percent to 6.6 percent by the end of 1991, the capital asset ratios of the NBFIs have tended to decline, with investment companies becoming negative, and savings institutions falling from a healthy 11.5 percent to 7.6 percent of total assets (Table 7.3). As capital asset ratios begin to converge, and different financial institutions begin to compete with each other over the limited pool of domestic savings, the question arises whether the public policy of segmented financial intermediation and differentiated regulatory treatment continues to make sense.

Table 7.3: Korea - Financial System Assets, 1986 & 1991
(Trillions of Won)

	1986	(%)	1991	(%)	Capital/Asset Ratio	
					1986	1991
Bank of Korea	18.6	8.8	46.4	8.8	0.7	3.3
Deposit Money Banks	97.2	45.7	220.4	41.7	3.6	6.6
Specialized Banks	36.0	16.9	58.9	11.1	3.4	1.5
Development Institutions	21.1	9.9	43.2	8.2	7.1	6.5
Savings Institutions	21.2	10.0	81.5	15.4	11.5	7.6
Investment Companies	9.0	4.2	38.1	7.2	3.6	-0.5
Life Insurance	9.5	4.5	40.5	7.7	n.a.	n.a.
TOTAL	212.4	100.0	528.9	100.0		

Source: Bank of Korea, Monthly Statistical Bulletin.

B. Economic Regulation versus Prudential Supervision

7.23 As stated earlier, industrial policy in Korea took precedence over the development of the financial sector. Strong economic regulation by the Government was imposed in the early stages of development to ensure that scarce domestic savings were channelled to priority sectors. The success of the industrialization of Korea since the 1970s bears adequate testimony to the fundamental correctness of that strategy. Nevertheless, in the words of the prime architect of that policy, "what is most regrettable is the fact that government intervention has retarded development of the banking system toward becoming a more responsible and efficient mobilizer of domestic savings and regulator of the resource allocation on the basis of sound banking principles and discipline enforced on the business community." (Nam, 1992, op. cit.) The basic issue is whether strong government economic regulation is still

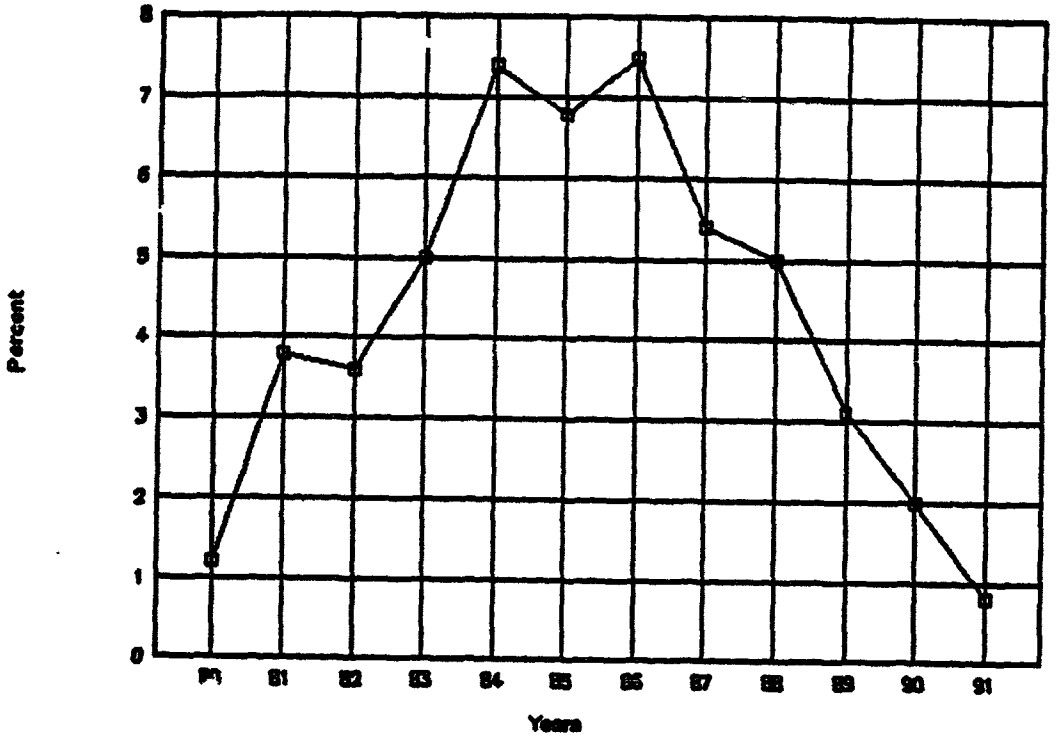
necessary during a period when the Korean economy has become more complex, mature and market-oriented. An important corollary is whether economic regulation should also be accompanied by prudential deregulation or re-regulation.

7.24 Policy-based loans provided by deposit money banks and NBFIs play a significant role in total credit in Korea (Chapter V). The principal danger of excessive government intervention in the financial sector, particularly through policy-based lending, is moral hazard. Moral hazard exists at two levels: the borrowers and the banks. Borrowers who have relied significantly on the availability of cheap funds from the banks at government directives may take excessive risks in the knowledge that the government would always bail them out. Banks which are subject to credit allocation directives do not develop significant credit or treasury skills. They assume that the Government will always relieve them of bad policy-based loans and that cheap refinancing from the central bank will always be available. The economic consequence of moral hazard and government intervention is that losses in the banking system are ultimately quasi-fiscal deficits. In other words, since governments are generally unwilling to allow large enterprises or banks to fail, the government is forced to absorb the losses, inefficiencies or bad business judgement of the borrowers and the banks. These moral hazard costs are not new to Korea.

7.25 In the wake of the second oil shock and the international recession of 1980-81, many highly-geared firms which had borrowed heavily under policy-based lending became insolvent, particularly those in overseas construction, shipping, textile, machinery and lumber industries[3]/. This in turn created large non-performing loans in the banking system, with such loans peaking at around 7 percent of total assets in 1984-86 (Chart 7.2). The Government bailed out the distressed firms by holding down interest rates, providing financial incentives to creditor banks to write off debt and interest payments, extending debt maturity, and rescheduling at cheaper interest rates. To assist the banks, the BOK provided a special loan of about W 1.8 trillion at 3 percent per annum to the banking system. Between 1981-87, BOK credit to deposit money banks rose from 18.3 percent of total bank credit to the private sector to 28.1 percent.

3/ Joon-Kyung Kim, October 1992, op. cit., p. 7.

Chart 7.2: Korea - Bad Loans of Korean Commercial Banks as a Percentage of their Total Assets, 1980-91
(Percent)



Source: Office of Bank Supervision, Bank of Korea.

7.26 Recent international experience suggests that these quasi-fiscal deficits can be large enough to destabilize the macroeconomic environment. The lessons of the dangers of rapid financial sector liberalization, based upon the experience in a number of countries in Southeast Asia, Australasia and Latin America, appear to be the following:

- Where there is excessive concentration of wealth in corporate and bank ownership, complete financial sector liberalization without proper supervision may exacerbate wealth concentration;
- Financial sector liberalization in a situation of low capital adequacy (or high bad debt levels) in the banking system may lead to excessive risk-taking by banks in pursuit of higher profits;
- Such risk-taking worsens with bank-enterprise conglomerates, when such economic groups take large risks, knowing that in the end governments cannot allow large banks to fail; and
- Financial sector liberalization has also been associated with speculative bubbles, especially when bank credit has been used to speculate in stocks and real estate. Such bubbles become difficult to deflate and control, and have sometimes led to massive capital outflow, when the capital account has been liberalized.

7.27 The above lessons suggest that financial sector liberalization should be exercised with some degree of caution, and the speed of liberalization would depend whether elements of the above risks exist within the country conditions. As will be shown later, some of the elements of risk are present in Korea, even though the macroeconomic conditions and the quality of supervision are much stronger in Korea than in many other developing countries.

C. Performance of the Banking Sector

7.28 This Section reviews the performance of the financial sector in Korea and its capacity to withstand competition from deregulation. Key performance ratios of the Korean banking sector are given in Table 7.4. The net income of Korean banks has generally been higher than for banks in G-7 countries[4/], averaging about 0.6 percent of total assets. The newer banks, especially joint-ventures with foreign banks, appear to be more profitable than the 5 large banks, which are privately owned but still government-directed. The profitability of these 5 large banks was particularly hurt in 1985-87 as a result of their high non-performing loans during this period.

7.29 Non-performing assets. Total reported non-performing loans of banks in Korea are well below international standards, with total non-performing loans at only 1.76 percent of total loans at the end of 1991, compared with 2.57 percent for national banks in the United States. However, the definition of non-performing loans is different from the US standard, since the collateral value is deducted against the total value of loans which are not being serviced. In Korea, loans are classified into 5 categories: normal, precautionary, substandard, doubtful and estimated loss. Bad debts are defined as those in doubtful and estimated loss. Normal loans are those that are serviced by customers with good debt-servicing capacity, and debt servicing has not been delayed more than 3 months. Precautionary debts are those that experience debt servicing delays of between 3-6 months. Substandard debts are those that are covered by collateral, but whose loans have been overdue for 6 months (housing loans - one year or more). Doubtful loans comprise that portion of substandard loans that do not have sufficient collateral, which are expected to be losses, but such losses have not been realized. Estimated loss loans are those substandard credits that have inadequate collateral and collection is not expected. This classification methodology understates the size of non-performing loans. Under international classification standards, the definition of a non-performing loan ignores collateral values. If a loan is not being serviced on time, even though it is fully collateralized, the loan is still non-performing, and the value of the collateral only affects the level of provisioning. However, since collateral is deducted from the loan outstanding in order to arrive at the level of doubtful or loss loans, the actual exposure of the bank to non-performing loans is therefore subject critically to a subjective valuation of collateral. If collateral value is added back to the definition, the size of the non-performing loans could be considerably higher.

4/ France, Germany, Italy, Japan, Switzerland, United Kingdom and United States, data for 1990, Bank Profitability, 1981-1989, OECD, Paris, 1991.

7.30 Korean banks do not provide as heavily for non-performing loans as OECD banks (Table 7.5). Net provisions as a percentage of total assets and gross income have been generally lower than for US or British banks, although the ratios are roughly comparable with that of German banks.

Table 7.4: Korea - Performance of Korean Banks, 1980-91 /a

	1980	1985	1987	1988	1989	1990	1991
A. Net income as a percentage of total assets /b							
Five Large Banks	0.79	0.14	0.16	0.38	0.74	0.68	0.62
Shinhan Bank	...	0.67	1.09	1.31	1.66	1.85	1.72
KorAm Bank	...	0.49	0.66	0.93	1.18	1.48	1.39
Regional Banks	1.39	0.52	0.30	0.59	0.80	1.33	1.05
All Commercial Banks	0.86	0.21	0.23	0.43	0.71	0.77	0.73
B. Bad loans as a percentage of total loans							
Five Large Banks	...	...	7.20	6.31	3.72	2.63	2.36
Shinhan Bank	...	...	0.25	0.64	0.40	0.22	0.33
KorAm Bank	...	...	0.04	0.03	0.01	0.00	0.17
Regional Banks	...	...	4.87	4.18	2.40	1.42	1.00
All Commercial Banks	...	...	5.40	5.01	3.09	2.11	1.76
C. Allowance for doubtful debts as a percentage of total loans							
All Nationwide Banks	2.06	1.25	1.28	1.36	1.54	1.51	1.59
Five Large Banks	2.06	1.24	1.25	1.33	1.49	1.46	1.57
Regional Banks	1.80	1.85	1.81	1.87	1.93	1.93	2.00
All Commercial Banks	1.88	1.57	1.36	1.44	1.59	1.57	1.65
D. Average interest rate on loans							
Five Large Banks	18.8	10.0	8.7	9.1	10.3	10.4	11.1
Shinhan Bank	...	11.9	12.1	13.3	13.2	12.7	13.1
KorAm Bank	...	11.1	11.3	12.2	13.1	13.8	14.5
Regional Banks	19.8	11.6	11.2	11.5	12.1	11.9	12.3
All Commercial Banks	19.0	10.3	9.3	9.8	10.5	10.7	11.4
E. Average interest paid on deposits							
Five Large Banks	12.0	6.6	6.4	5.7	5.8	6.1	6.7
Shinhan Bank	...	6.0	7.0	6.6	6.9	7.4	8.0
KorAm Bank	...	7.5	7.6	7.2	6.6	6.6	7.2
Regional Banks	12.2	6.1	6.9	6.7	6.1	6.2	6.7
All Commercial Banks	12.0	5.7	6.5	6.0	5.9	6.2	6.8
F. Spread	7.0	5.6	2.8	3.8	4.6	4.5	4.6

/a Excludes foreign banks.
/b Excludes trust assets from total assets.

Source: Superintendent of Banks.

Table 7.5: Korea - Net Provisions as a Percentage of Total Assets & Gross Income, 1985-90
(Percent)

	1985	1986	1987	1988	1989	1990
Korea						
Net Provisions/Total Assets	0.5	0.2	0.3	0.4	0.6	0.4
Net Provisions/Gross Income	16.8	11.5	10.9	14.6	16.5	11.9
Australia						
Net Provisions/Total Assets	2.8	0.9	0.5	0.8	1.1	0.7
Net Provisions/Gross Income	40.2	17.6	12.8	16.8	23.6	1.84
Germany						
Net Provisions/Total Assets	0.5	0.6	0.4	0.3	0.4	0.5
Net Provisions/Gross Income	13.4	15.1	13.3	7.8	13.1	16.5
Norway						
Net Provisions/Total Assets	0.8	0.9	0.9	1.6	1.6	2.0
Net Provisions/Gross Income	17.2	20.7	24.1	40.2	36.0	55.1
United Kingdom						
Net Provisions/Total Assets	0.6	0.5	1.6	0.3	1.7	1.0
Net Provisions/Gross Income	11.7	11.0	31.0	6.2	32.7	20.1
United States						
Net Provisions/Total Assets	0.7	0.8	1.3	0.6	1.0	1.0
Net Provisions/Gross Income	14.3	16.3	26.3	11.1	18.9	18.5

Source: Bank of Korea; OECD, Bank Profitability, 1981-1990, Paris, 1992.

7.31 The commercial banks are however not as profitable or efficient as the NBFIs. Since the short-term finance companies do not maintain large branches and service mainly large clients while at the same time enjoying less economic regulation, their profitability has been considerably higher. Profits per employee of the finance companies are on average 16 times higher than the banks in 1991. Average profits as a percentage of total assets for the finance companies was 2.2 percent, nearly 3 times higher than that of the banks (Table 7.6). In recent months, however, non-performing loans of the short-term finance companies have begun to increase, from only 0.9 percent of total assets in the year to June 1991 to 2.4 percent of total assets in the year to June 1992. Provisions against bad loans, however, still exceeded the level of reported non-performing loans.

7.32 An interesting aspect of Korean credit allocation policies is the restriction of bank lending to large business groups (chaebols), which was first introduced in 1987 to induce more equitable access to credit. Specifically, to reduce corporate gearing and to increase credit access by small- and medium-sized enterprises (SMEs), the authorities "moral suaded" the 30 largest chaebols to reduce their shareholdings in affiliates and real estate, and to raise capital in the stock market. In the stock market boom to 1989, this was highly successful in reducing the chaebols' gearing. At the same time, the share of banks' loans to the 30 largest chaebols has fallen

from 23.7 percent in 1988 to 19.8 percent in 1990, while the share of NBFIs credit has risen correspondingly from 6.5 percent to 43.6 percent over the same period (Kim, 1992, op cit). Over the same period of time, banks are required to increase their lending to SMEs equivalent to 35 percent of their increase in deposits (80 percent in the case of the regional banks). Table 7.7 shows that despite the "moral suasion" against investment in real estate, the 30 largest chaebols continued to increase their holdings in land and buildings, financing these initially through internal funds, and by 1990, mainly through bank borrowings.

Table 7.6: Korea - Short-term Finance Companies, /a
Selected Performance Indicators, 1991-92

	Year to 6/91		Year to 6/92	
	Bil. Won	Percent	Bil. Won	Percent
Total Revenue	3,163	100.0	3,096	100.0
Operating Expenses	2,368	74.9	2,309	74.6
Overhead	356	11.3	414	13.4
Total Expenses	2,724	86.2	2,723	88.0
Profit before Tax	439	13.8	373	12.0
Tax	124	3.9	162	5.2
Profit After Tax	315	9.9	211	6.8
Total Profits/Assets		2.2		2.2
Reserves for Bad Debts/Total Loans		1.8		3.2
Non-performing Loans/Total Loans		0.9		2.4

/a Year to June 1992 data excludes 8 companies which were merged and converted to securities companies and banks.

Source: Ministry of Finance.

7.33 The above analysis suggests that there was the beginning of a real estate bubble between 1987-90, with increasing investments in land and buildings, and a sharp rise in the value of real estate. One of the dangers of the "moral suasion" to the chaebols to divest their real estate is that they may have disposed of these real estate to the SMEs, at a time when the Government was also encouraging banks to lend more to the SMEs. Thus, those SMEs that bought real estate at the height of the real estate boom may be extremely vulnerable to deflation in real estate prices, especially if they bought them on borrowings carrying real interest rates of more than 10 percent

per annum.

Table 7.7: Korea - Top 30 Chaebols' Borrowings & Real Estate Holdings, 1987-90

	1987	1988	1989	1990
Total Debt (Billions of Won)				
Due to Banks	18,404	18,718	20,213	24,954
Due to NBFIs	6,470	7,047	11,640	14,902
Total	28,874	25,765	31,853	38,956
Total Real Estate (1,000 m^2)				
Land	374,089	398,778	406,501	
Buildings	25,438	28,043	31,809	
Total	399,527	426,821	438,310	
Value (Billions of Won)	7,770	10,070	13,139	
Millions of Won/Square Meter	19.448	23.594	29.977	
Memorandum Items:				
Increase in Real Estate (Billions of Won		2,300	3,069	
Increase in Borrowings		892	6,087	
Percent Incr. in Land Price		21.3%	27.1%	
Real Estate/Debt Ratio	31.2%	39.1%	41.2%	

Source: KDI "An Analysis of Korea's Chaebol Economy," by Chung Byoung-hyu and Yang Young-shik, 1992, quoted in Korea Economic Weekly, September 28, 1992.

D. Vulnerability of the Korean Financial System to a Bubble

7.34 This Section examines the possible vulnerability of the Korean financial system to a share and real estate bubble currently evident in the Japanese and the United States banking system. The sharp decline of the Korean stock market since its peak of 1,005 in 1989 has had a significant impact on the liquidity and solvency of many borrowers in Korea. The effect of a stock market decline is more significant in a highly leveraged environment than a market where leverage is low. The Seoul stock market index at the end of July 1992 has declined by nearly 48 percent since its peak in 1989. Based upon the ownership distribution of shares, it is estimated that the wealth losses to holders from the share price decline was the equivalent of 9.6 percent of GNP in 1990 and about 4 percent of GNP in the first 7 months of 1992. The largest losses were borne by individuals and private companies (including securities companies and investment trust companies). Government attempts to shore up share prices have resulted in large losses to the investment trust companies, requiring a W 3.2 trillion rescue package from the

BOK to rescue the investment trust companies (and ultimately the lending banks) in August 1992.

7.35 The full impact of the market decline (or any rise in interest rates from interest rate liberalization) on the value of the stocks and bonds held by the financial institutions is not fully transparent, because currently banks and other financial institutions still reflect these at cost and not market price. The OBS has already required banks to make provisions for the shortfall between market price and costs, and so far banks have provided up to 80 percent of such losses. Because of various policy loans at below market rates, it is clearly of concern to the supervisors that any interest rate liberalization would not subject financial institutions to solvency pressures if bonds or long-term securities held have to be marked-to-market.

7.36 Although the decline of the stock market was damaging to individual and corporate liquidity and solvency, the larger damage could arise from the exposure of the banking system to real estate. Nearly 40 percent by value and number of bank loans are secured by real estate (Table 7.8). After increasing by 32 percent in 1989, annual land prices growth began to slow, recording a 0.5 percent decline in the second quarter of 1992. House prices in Seoul peaked in April 1991, and fell 1 percent in the first quarter of 1992 and 3.8 percent in the second quarter[5]/. Apartment prices fell by 5.8 percent, while single family permits for new construction in Seoul fell 52.6 percent from a year earlier, as against a nationwide fall of 25.1 percent. The increasing trend towards investments in real estate, despite moral suasion by the authorities, can be seen from Table 7.9, compiled from the Flow of Fund Accounts. Since 1986, there was a noticeable swing of investments in land, rising to 3 percent of GNP by 1990, financed increasingly by debt. The flow of debt/equity had risen from a low of 78.3 percent in 1988, in a rising stock market, to 306.5 percent by 1990. The movement towards real estate was understandable given the under-investment in housing and office accommodation in earlier years. Initial investments in real estate yielded high returns. It was estimated that between 1974 to 1987, investment in land produced a profit of 1,004 percent, while the same amount invested in business investments would have yielded about 331 percent[6]/.

7.37 The shift towards non-tradeables, arising from an appreciation in the real exchange rate and declining profits in the export sector, is also detectable in the profits and debt ratios between manufacturing companies and real estate and business services. Between 1983-1990, the income to equity ratio for manufacturing had fallen from 15.5 percent to 9.1 percent, while the ratio for real estate and business services rose from 20 percent to 27.6 percent. In contrast, while the manufacturing sector had lowered its debt ratio from 360.3 percent to 286.3 percent, the real estate and business services sector's debt ratio had doubled from 162.1 and to 377.5 and (Table 7.10). Thus, this sector has become vulnerable to a bubble deflation.

5/ Korea Economic Weekly, October 5, 1992.

6/ Economic Report, "Middle Class Hardest Hit as Bubble Burst," September 1992.

Table 7.8: Korea - Collaterals for Bank Lending, 1981 & 1991
(Percent)

	1981		1991	
	Number	Value	Number	Value
Real Estate	42.3	49.6	39.6	42.3
Trust /a	49.2	39.9	46.0	41.3
Personal Estate	0.2	1.6	0.8	2.3
Deposits	7.7	5.0	9.0	4.3
Other	0.6	3.9	4.6	9.8
TOTAL	100.0	100.0	100.0	100.0

/a Includes guarantees by Korea Credit Guarantee Fund

Source: BOK, Economic Statistics Yearbook, Table 32.

7.38 There are sufficient indicators that the slowdown in economic growth and high real interest rates are beginning to hurt business and also their lending financial institutions. In the first half of 1992, 3,391 SMEs declared bankruptcy, compared with 6,154 in the whole of 1991. In the same period, 18 major listed companies also went bankrupt. The dishonored bills ratio rose to 0.12 percent in June 1992, which was last reported at the end of the 1980-82 recession. Indeed, with real interest rates in Korea averaging 9.4 percent per annum in 1991, versus 4.2 percent in Japan, 3.8 percent in Taiwan and 1.1 percent in the USA, it was surprising that the bubble deflation in Korea has not been more severe, since it has hurt banks considerably in the other 3 countries.

Table 7.9: Korea - Financing of Non-financial Corporate Sector, 1986-90
(Percent of GNP)

	1986	1987	1988	1989	1990
Financing for:					
Gross Fixed Capital Formation	17.3	17.4	16.1	18.2	22.1
Stocks	0.7	1.8	1.3	1.9	0.6
Land	0.8	1.0	1.3	1.7	3.0
Total	18.8	20.2	18.7	21.7	25.7
Financed by:					
Debt					
Loans	6.8	6.3	4.1	9.6	11.4
Short-term bills	1.0	-0.2	0.9	1.5	1.0
Long-term bonds	2.0	0.7	1.1	3.0	5.5
Net foreign liabilities	-0.4	-0.3	0.8	-0.7	1.6
Equity & Depreciation					
Depreciation	8.0	8.4	8.2	7.9	7.4
Savings	3.0	4.0	3.6	1.7	2.0
Capital participation	0.7	1.3	0.9	0.9	1.0
Stocks	1.0	2.8	4.2	4.8	3.3
Other					
Trade credit	-1.1	-0.7	-0.9	-1.1	-0.7
Currency & deposits	-2.2	-3.4	-4.5	-5.8	-5.4
Other	...	1.3	0.3	-0.1	-1.4
Memorandum Items:					
Gross interest expense	9.2	8.4	7.8	8.4	8.5
Net interest expense	7.1	6.5	5.6	5.7	5.8
Debt/Equity flow during year /a (Percent)	199.8	78.7	78.3	181.1	306.5

/a Excluding depreciation.

Source: Flow of Fund Accounts, 1986-1990, BOK.

Table 7.10: Korea - Selected Financial Indicators, Corporate Sector, 1983-90

	1983	1984	1985	1986	1987	1988	1989	1990
Growth Rate of Sales								
Manufacturing	17.8	17.9	9.8	16.8	22.6	15.8	7.0	18.6
Real Estate & Business Services	27.7	22.0	16.0	16.0	31.2	25.8	32.5	39.9
Ordinary Income to Stockholders Equity								
Manufacturing	15.5	15.2	13.2	20.2	19.9	20.6	10.1	9.1
Real Estate & Business Services	20.0	13.7	22.9	13.5	22.5	29.9	34.1	27.6
Financial Expenses to Total Borrowings								
Manufacturing	13.6	14.4	13.4	12.5	12.5	13.0	13.6	12.7
Real Estate & Business Services	9.5	11.1	14.9	12.0	12.4	16.9	12.8	13.9
Debt Ratio								
Manufacturing	360.3	342.7	348.4	350.9	340.1	296.0	254.2	286.3
Real Estate & Business Services	162.1	285.2	241.5	270.9	288.7	228.0	245.5	377.5

Source: Financial Statements Analysis, Bank of Korea, 1992.

E. Weaknesses of the Existing Prudential Framework

7.39 The above analysis suggests that while the Korean financial system can be complimented on its strong legal powers given to the authorities to supervise the system, and the success of economic regulation to date, there are some areas which need to be strengthened to prepare for a broad-based financial sector liberalization. These are discussed below.

7.40 Systemic risks. This is due to the segmentation of the financial system and its supervision. The short-term finance companies, for example, appear to have very good credit monitoring and low risks because they typically do not lend on collateral, but on sound evaluation of cash flow. Accordingly, they tend to concentrate on the larger borrowers, with more than half of their loans to the chaebols, supported by cross-guarantees. They do not have long-term debt, but are limited to short-term debt which is rolled-over. On the other hand, the banks operate a Prime Bank system, where the lead bank assumes the function of lender of last resort to a borrower group. Although the banks take collateral, they are vulnerable to a sharp decline in general economic activity and to falls in real estate prices, as was evident in the 1980-81 recession. Thus, there is a fundamental systemic risk, in which adroit short-term finance companies can quickly withdraw credit from a faltering debtor, leaving most of the risks to the Prime Bank. However, since the Government is unwilling to allow the larger banks to fail, there will be considerable pressure on the central bank to intervene to support banks with more soft loans, as was the practice in the 1980s.

7.41 Accounting standards. Reporting standards for Korean financial institutions are still not yet fully up to international standards, so that the impact of market changes are not completely transparent to the investor or depositor. Loan classification standards need to be harmonized with international standards by eliminating the deduction of collateral values from the measurement of non-performing loans. Collateral values can be deducted

from the outstanding values of non-performing loans in the computation of the level of provisioning. Transparent non-performing loan data would force bank management to be more vigilant in credit evaluation and monitoring, while allowing investors to evaluate more accurately the performance between different banks. Moreover, the valuation of securities (shares and possibly corporate bonds) should reflect market prices rather than cost. At least, the market value of such holdings should be disclosed, thus forcing management to provide for such losses.

7.42 High gearing in the system. The Korean financial system differs from many other developing country models since Korean enterprises typically have significantly higher leverage than their developing/developed country counterparts. Korean firms have succeeded in achieving stability through growth, since growing market shares and rising cash inflows have financed their heavy investment program and their leverage. However, such high leverage exposes the enterprises (and their lender financial institutions) to higher risks due to economic slow-downs. A major challenge in the 1990s is the ability of the financial system to help "de-gear" the enterprise sector, such that overall risks are better supported by higher capital levels, and the whole financial system would be more stable and less vulnerable to external shocks or internal bubbles.

7.43 Disintermediation. Although the banking system is precluded from financing real estate and consumer finance, considerable disintermediation was occurring as chaebols and SMEs obtained funding from the banking system under policy lending and funnelled these towards real estate investments and lending for car purchases. In other words, enterprises became housing and consumer financiers, instead of the banking system. The problem with this trend is two-fold. First, the banking statistics did not reveal to the policy makers the real danger of over-lending in these sectors. Second, it deprived the banking system of profits in a legitimate area of business.

F. Summary and Recommendations

7.44 Government supervision over the financial system in Korea has been historically strong for economic regulation purposes. However, with the advancement of the Korean economy into the ranks of the OECD countries and the increasing market-orientation of both the real and the financial sectors, the degree of "window-guidance" or government intervention will have to decline.

7.45 Such withdrawal of the Government from direct credit allocation is required in order to allow the financial sector to exercise better credit discipline on enterprises and to play a more efficient role in resource allocation according to market forces. Withdrawing from economic regulation does not mean that the Government should reduce prudential supervision. Indeed, the move towards greater market orientation would require the Government to be more transparent in the following:

- Rules of the game in the financial sector, particularly greater freedom of entry and orderly exit and level playing field;
- Clear capital adequacy and liquidity rules, which allow the financial institutions to improve their own risk management;

- Avoid usage of prudential supervision as surrogate economic regulations; and

- Generate timely and reliable system-wide information on performance of the financial institutions, such as sectoral lending and profitability/solvency indicators.

7.46 Korea already has a strong supervisory structure in place, with tight leadership from the MOF. However, suggested improvements are as follows:

(a) Consolidate supervision over the entire financial system under a single independent body which is directly responsible for systemic monitoring and solvency of the financial system. The present system of supervision with the OBS being responsible for roughly one half of the system, and the MOF for the other half, with some delegation of examination functions to the OBS, implies that no single agency will have at all times a global or systemic view of risk trends in the financial system. Segmented supervisory myopia can arise because each half of the system assumes that its half is relatively safe from risks, while both halves are exposed to risks in the real sector that may not be readily apparent to both. A clear example of this is the fact that NBFIs have no collateral lending and have only short-term loans. This appears to have low risks, but in reality, NBFIs cannot "pull the plug" on credit to their borrowers without inflicting damage from the credit crunch on the real sector and the prime banks.

There is no perfect institutional solution to an artificial separation between the objectives of industrial policy, monetary policy and supervisory policy. All of the above have fiscal or quasi-fiscal implications. However, placing supervisory policy within the MOF can easily subject the financial sector to continued policy lending or economic regulation. Since the objective of financial sector liberalization is to separate industrial policy from financial policy (in order to achieve more market-oriented financial discipline on the usage of funds), then it would be natural to coordinate monetary policy with supervisory policy, which are both sides of the same coin.

In several OECD countries, the monetary policy function and the supervisory function have been vested in the central bank, since the central bank must be in a position to know when it is providing lending of last resort, if it is also providing "capital of last resort". In other OECD countries, such as France and Japan, the bank supervisory function has been vested with a Bank Commission within the Ministry of Finance. Some countries vest supervision with a body independent of the Ministry of Finance and the other government ministries, such as in Canada, Chile, Hungary and Germany. The concern is to separate prudential regulation from economic regulation. This trend is also seen in the securities industry, where the Securities Exchange Commission is an autonomous body from the Ministry of Finance.

(b) Accounting standards in Korea should move closer to OECD standards as soon as possible. Specifically, loan classification and loan provisioning standards, as well as marking securities values to market should be amended fairly quickly, to make the performance and solvency of domestic financial institutions more transparent and comparable with international standards.

(c) Increased transparency. Lending to real estate and durables by the banks and finance companies should be allowed within a prescribed limit, so as to make the actual flow of funds more transparent. Currently, enterprises encourage disintermediation from the banking system by borrowing bank loans to finance (through inter-company loans or commercial bills) the non-priority sectors of real estate and consumer durables (such as car loans). The result is that the authorities are not able to monitor more accurately the ultimate usage of funds through the banking system, and therefore prevent on a timely basis excessive risk concentrations in any particular sector (e.g., real estate). In the absence of strong and independent outside supervision, the Government at times reverts to direct intervention (such as the 1991 rule on chaebol's picking three major business activities) to control credit access by the private sector and encourage "productive" as compared to "speculative" borrowing.

(d) Mismatch in maturity. From a sectoral risk management perspective, the Korean financial system still relies heavily on using short-term deposits to finance long-term investment. This fundamental maturity mismatch occurs partly because of the late development of the securities and long-term bond markets, and partly because of the lack of strong and deep contractual savings institutions, such as private pension funds and strong life insurance companies. Recent liberalization efforts to increase competition through entry of foreign life insurance companies have helped partly, but from a strategic point view, system-wide stability and soundness can only be strengthened through the narrowing of the maturity mismatch and the strengthening of the capital base of the financial sector, as well as the enterprise sector.

VIII. KOREAN BOND MARKET: ITS CURRENT STATUS AND FUTURE PROSPECTS

Introduction

8.1 Korea has one of the largest fixed income securities markets among the emerging capital markets. At the end of 1991, the total fixed income securities outstanding amounted to US$80.8 billion, or 40 percent of GNP. This compared well with the debt market capitalization of US$17.3 billion in Taiwan, US$26.9 billion in Malaysia, and US$5.8 billion in Thailand. The fixed income securities market in Korea consisted of US$42.4 billion in government securities and US$38.4 billion in corporate bonds. Although the size of the Korean fixed income securities market is very large, the secondary market is very shallow. In 1991, the total volume of trade amounted to only US$2.8 billion, an average turnover ratio of 3.4 percent, compared with 14 percent in Malaysia and 23.4 percent in Hong Kong. This chapter describes the structure of the Korean fixed income securities market, presents an analysis of the markets, both primary and secondary, and identifies the causes of slow development of the secondary market. Recommendations for improving both primary and secondary markets are given. Finally, the role of foreign portfolio investment in the bond market is discussed.

8.2 The development of the fixed income securities market in Korea dates back to the 1950s when the Government first issued bonds to raise funds for the reconstruction of infrastructure after the Korean War (1950-53). In the 1960s, foreign official loans and commercial bank loans were the main financing vehicles for economic development and growth of the private sector. In 1963, Ssangyong Cement issued convertible bonds, the first corporate bond issue in Korea. As the increasing importance of securities markets as a means of utilizing domestic capital resources was recognized, the Korean government officially established the bond market in 1968, pursuant to the Capital Market Promotion Act, to further promote the development of the domestic securities markets. Under the act, the Korean Investment Corporation (KIC) was formed to oversee the issuance, underwriting, distribution and secondary market activities of fixed income securities. Most notably, the KIC introduced the guarantee system for corporate bonds in 1972, which resulted in a considerable expansion of the bond market.

8.3 With the successful introduction of floating rate bonds and bond transactions under repurchase or resale agreements (RP bonds) in 1980, bond issues accounted for as much as 80 percent of the total funds raised in the capital market in the early 1980s. During the second half of the 1980s, activities in the primary bond markets were dominated by government bond issues in the form of MSBs and an increase in new bond issues by corporate borrowers as weak stock market conditions became unfavorable for new equity issues.

A. Market Structure and Institutional Aspects

Primary Market

8.4 Government Bonds. Government bonds were first introduced as a means of supporting large fiscal deficits in the early 1950s and of providing finance for reconstruction works in the aftermath of the Korean War. Government bonds to finance reconstruction and development dominated bond markets in Korea through 1963. During 1964-67 new government bond issues were drastically curtailed in response to the growing need for a fiscal balance. Starting in 1968, however, the Government's ambitious economic development plan called for huge investment funds, particularly to expand infrastructure. This brought a series of government-guaranteed special bonds, including government bonds for road construction, followed by various bonds for electricity, housing and development financing.

8.5 The second half of the 1980s witnessed a dramatic surge in the new issues of government bonds in Korea. The size of the primary bond market has risen substantially. From 1985 to 1991, total outstanding bonds increased about six times, the ratio of new bond issues to GNP rose 2.5 times, and the ratio of bonds outstanding to GNP went up more than five times to over 40 percent by the end of 1991.

8.6 Among the various types of government bonds in Korea, MSBs dominate the primary market activities. The MSBs are short-term securities that are issued on a discount basis. The maturities range from 63 days to 546 days, and the MSB series with a 371 days' maturity is most active. The BOK is the issuing entity for the MSBs, which are largely allocated to financial institutions (Chapter IV) at below market interest rates. New MSB issues in 1991 amounted to W 22.6 trillion, representing about 70 percent of the total non-corporate bond issues, or 42 percent of the total new bonds issued in Korean markets. MSBs were used to absorb excessive monetary expansion caused by a sudden jump in the country's trade surpluses during the period of 1986-89. As the trade surplus disappears, the MSBs became the instrument for absorbing liquidity from the market.

8.7 Other government bonds include public housing bonds (with maturities of 5 or 20 years), public investment bonds (3 year maturity) and foreign exchange stabilization bonds (3 year maturity). The MOF administers the issuance of these government bonds. There are various municipal bonds (mostly linked to specific projects rather than general obligation) issued by local governments, particularly large cities like Seoul and Pusan. In support of various government or public utility programs (e.g., telecommunication and electricity) requiring large scale funding, a series of special bonds is also issued. Long-term financial institutions such as the KDB and the Korea Long-Term Credit Bank can issue, subject to the approval from the MOF, special financial bonds to raise funds for their lending.

Table 8.1: Korea - New Issues of Government and Public Bonds, 1990-91

Type	1990		1991	
	(Bil Won)	(%)	(Bil Won)	(%)
MSBs	25,762.1	80.9	22,590.1	71.1
Other Government Bonds	4,157.3	13.0	4,922.6	15.5
Municipal Bonds	800.0	2.5	1,100.0	3.5
Special Public Bonds	1,141.6	3.6	3,156.4	9.9
Total	31,861.0	100.0	31,769.1	100.0

Source: Ministry of Finance.

8.8 Corporate Bonds. The most profound development in the corporate bond market in Korea occurred in 1972, when the KIC introduced the guarantee system for corporate bonds, catalyzing a considerable growth in new corporate bond issues. Under this program, Dong-Ah Pharmaceutical Co. successfully floated a W 250 million bond issue, which marked the beginning of a more balanced development between government and corporate bonds in Korean securities markets. Subsequently, various government measures (e.g., the government general plan for the promotion of the bond market, released in 1977) to encourage direct financing, as opposed to financing through commercial banks, and to promote domestic capital markets, gave additional impetus to a rapid expansion of new corporate bond instruments as well as the bond investor base in Korea.

8.9 The upward trend in new corporate bond issues continued through the 1980s, which was in part facilitated by the Government's gradual deregulation measures. In December 1984, the Government began to adopt a partial deregulation of interest rates on new corporate bonds and convertible securities. This was followed by further liberalization in commission schedules and coupon rates applied to new issues in 1986. For the last few years of the 1980s, however, the growth in the corporate bond sector was outpaced by the public bond sector, as a huge supply of MSBs dominated the activities in the primary market. Since then, new corporate bond issues jumped as a weakening stock market could not absorb new equity offerings.

8.10 Bond issuance has become an important vehicle for Korean corporations to raise direct debt funds. Corporate bond issues also helped Korean firms to diversify their funding sources; bank financing, aside from private informal markets, has traditionally been the primary source of funding in Korea. During the ten year period ending in 1991, the number of new corporate bond issues increased about five times, and the amount of funds raised jumped more than ten times.[1/] One of the

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[1/] Annex Table A.1 provides time series data for Korean corporations' securities offerings, including both bonds and stocks.

important latest developments to facilitate this growth was the Government's deregulation measures in 1991, intended to allow autonomous rate determination for new corporate bond issues.

8.11 There are two major channels through which new corporate bonds are floated: private placements and public offering. Private placements are used in cases of relatively small size of issues and issues by unlisted companies. The underwriting business associated with private placements has been limited to several specialized banks, including KDB and Korea Long-Term Credit Bank, and some life insurance companies. But since September 1990, city and regional banks have been allowed to underwrite private placed securities. The share of private placements in the primary bond market has increased sharply over the last several years. It was only around 3 percent of the total in 1987-88, but exceeded one quarter of the total new corporate bond issues in the first half of 1991.

8.12 More than 80 percent of the outstanding corporate bonds and new issues are guaranteed by various financial institutions (see Annex Table C.2). As of end-1991, securities companies were leading guarantors of corporate bonds, representing about 30 percent (or W 7.7 trillion) of the total outstanding guaranteed corporate bonds (W 26.8 trillion), followed by city banks (24 percent) and Credit Guarantee Fund and Surety Companies (20 percent). Korean branches of foreign banks also provided guarantees for Korean corporate bonds worth W 1.5 trillion, or almost 6 percent of the total outstanding corporate bonds.

8.13 About two thirds of new corporate bonds brought to Korean markets are issued by the exchange-listed companies. One of the most notable developments in the primary bond market over the last several years has been the increasing number and amount of bond issues by small- and medium-sized companies. These companies accounted for almost 30 percent of total new issues in 1991 (see Annex Table C.3). The proceeds from bond issues are used for various purposes: refunding, operating capital, and fixed capital. While their shares vary year by year, operating capital has been the primary use of the bond proceeds through the 1980s. Over the 1990-91 period, however, fixed capital was the most significant purpose for bond financing, representing 48 percent (in 1990) and 37 percent (in 1991), compared with operating capital (34 percent in 1990 and 33 percent in 1991) and refunding (18 percent in 1990 and 30 percent in 1991). More than 90 percent of corporate bonds issued in Korean markets have maturities of less than 3 years. The maturity structure of Korean bonds has become more skewed to a shorter end in the recent years (see Table 8.2).

Table 8.2: Korea - Offerings of Corporate Bonds by Maturity, 1985-91
(Billions of Won)

Year	3 years and below		3 - 5 years		5 years and over		Total	
	Num	Amount	Num	Amount	Num	Amount	Num	Amount
1985	620	1,485.6	433	1,380.9	43	352.6	1,096	3,219.0
1986	514	1,164.0	330	1,252.0	56	313.0	900	2,729.1
1987	682	1,515.7	315	1,518.2	22	155.6	1,019	3,189.6
1988	938	3,400.6	123	822.8	2	21.0	1,063	4,244.3
1989	1,110	5,280.3	98	1,478.2	9	200.5	1,217	6,959.0
1990	1,727	10,294.9	41	689.8	8	111.0	1,776	11,095.7
1991	2,640	11,783.7	83	610.2	74	379.8	2,797	12,773.4

Source: Korea Securities Supervisory Board.

8.14 A credit rating system is in place and a credit rating is required for the issuance of certain types of corporate bonds. Corporate bonds that are subject to mandatory credit ratings are non-guaranteed long-term bonds (with more than one year's maturity) and short-term bonds to be sold to the general public. There are three major Korean rating agencies: Korea Credit Rating, Korea Credit Information, and Korea Enterprise Rating. They have been active since 1987. Currently, foreign rating agencies are not allowed to carry out credit rating of Korean bonds. Since the majority of bonds are guaranteed by financial institutions, the credit rating agencies have not developed much, and their role in differentiating the credit risks of the issuers of corporate bonds has been negligible.

Secondary Market

8.15 Government Bonds. The secondary market in government bonds is relatively underdeveloped and the turnover in 1991 accounted for less than 4 percent of the outstanding volume. The thinness of the secondary market is attributable largely to a lack of general public demand for fixed income securities, which are either issued by the Government below market rates or allocated by the BOK to the NBFIs, as in the case of the MSBs. Interest rates on the government securities are not market-determined and there is no auction process in place. Even when the price of these bonds moves to reflect market interest rates, the illiquid market condition presents risks to short-term traders as well as investors because of large spreads between the bid and ask quotes.

8.16 Secondary market transactions of Korean bonds are concentrated in the OTC market, accounting for as much as 90 percent of the total trading volume in 1991 (Table 8.3). This represents a sharp increase over the mid-1980s when the Exchange and the OTC had about equal market share. Increased activity in the OTC market was facilitated by the Government's gradual deregulation of bond trading outside the Exchange in recent years, and by the institutional investors' preference for OTC trading due to its

convenience (see Annex Table C.7).[2]

Table 8.3: Korea - Secondary Market Trading of Bonds, 1985-91
(Billions of Won)

Year	Exchange Market		OTC Market		Total	
	Broker	Dealer	Broker	Dealer	Broker	Dealer
1985	3,533.2	3,623.1	23.5	12,456.2	3,556.7	16,079.3
1986	3,127.3	3,208.6	16.8	5,936.9	3,144.1	9,145.5
1987	7,116.1	7,300.2	40.1	12,443.5	7,156.2	19,743.7
1988	8,587.8	8,508.9	731.7	33,900.9	9,319.5	42,409.8
1989	5,174.9	5,148.8	30.4	35,780.0	5,205.3	40,928.8
1990	3,246.2	3,187.1	42.2	35,581.0	3,288.4	38,768.1
1991	2,233.7	2,080.0	618.2	58,577.8	2,851.9	60,657.8

Source: Korea Securities Supervisory Board.

8.17 Corporate Bonds. In order for a bond to be listed on the KSE, except for government bonds or debentures issued by a corporation established under special laws, prior approval must be obtained from the SEC. As of the end 1991, a total of 5,527 corporate bonds with a total value of W 29.2 trillion were listed on the exchange.

8.18 Secondary market trading of Korean fixed income securities on the exchange has been stagnant, and in fact has fallen since 1988. The total sales value in 1991 (W 2.1 trillion) was the lowest in ten years and only one third of the trading volume recorded in 1982, when the total bonds outstanding was less than one-tenth of that in 1991. This means that the secondary market turnover ratio has declined precipitously--108 percent in 1982, 25 percent in 1988, and 3 percent in 1991. In contrast, OTC trading of bonds has been on the rise, representing more than 90 percent of the total. Since 1986, the majority of bond sales was executed outside the Exchange, despite the fact that most bonds are listed on the KSE. Indeed, bond trades dominate the OTC market where very limited transactions of stocks take place. This unique phenomenon may be attributed to several advantages afforded by OTC trades, including greater flexibility, anonymity (to avoid exposure to close public scrutiny), and relatively low cost.

8.19 A predominant share of Korean bonds is in the hands of financial institutions, particularly investment trust companies and commercial banks

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[2] The subsequent section on corporate bonds will further discuss secondary bond market activities in Korea.

(Table 8.4). The concentration of bond holding appears to make OTC trades convenient for participating institutions. Furthermore, most investors are not actively engaged in frequent bond transactions for short-term yield pick-up as they tend to take buy-and-hold positions, which limits trades on the Exchange. Considering that bond trades are generally motivated by changing prospects for interest rates in established and well-functioning markets, the lack of secondary market liquidity in the exchange market may reflect a fundamental shortcoming of controlled interest rates, and institutional deficiencies in the Korean securities markets.

Table 8.4: Korea - Major Holders of Korean Bonds, 1985-91
(Percent)

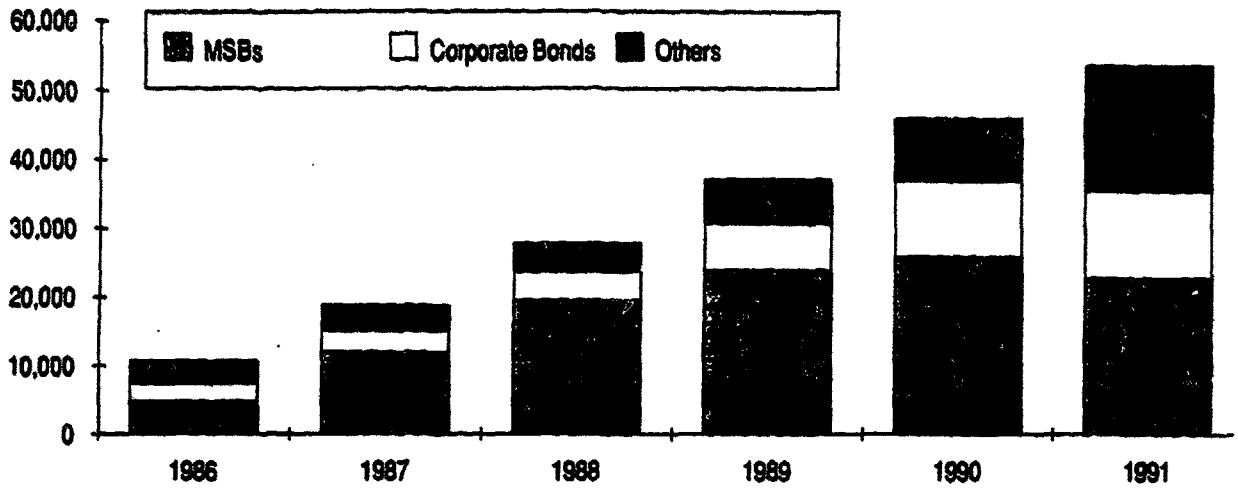
Investor	1985	1986	1987	1988	1989	1990	1991
Financial	80.1	86.2	87.1	89.9	87.0	85.9	82.1
Government Sector	1.3	1.4	0.4	0.4	0.5	1.3	1.4
Corporate Sector	10.1	5.1	5.1	2.8	4.2	4.5	7.3
Individuals	8.5	7.3	7.4	6.9	8.3	8.3	9.2
Foreign Sector	-	-	-	-	-	-	-
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Amount (W Bil.)	17,321	22,391	31,204	42,302	53,779	66,312	75,668

Source: Bank of Korea, Dong-Suh Securities Co.

B. Pattern of Bond Issues

8.20 Despite the rapid expansion in primary issues over the last several years, the Korean bond market continues to confront various structural difficulties that impede efficient intermediation of financial resources in Korea. On the macro level, the most fundamental problem facing the bond markets is that bond rates are not completely determined by market forces. The large spreads between bond rates artificially applied to certain new issues and effective secondary market rates make it impossible for the bond market to function by controlling the supply and demand of fixed income securities through the interest rate mechanism, resulting in distorted resource distribution. Under this environment, the bond market fails to provide a reliable benchmark for interest rates in the economy.

Chart 8.1: Korea - Offerings in Korean Bond Markets, 1986-91
(Billions of Won)



Source: Ministry of Finance, Securities Supervisory Board.

8.21 The size of Korean bond markets grew substantially in recent years, as Chart 8.1 illustrates. But the share of fixed-income securities in total financial assets has not increased proportionally because of large savings in the form of high-yield short-term financial products (issued by short-term finance companies). In addition, compared with industrial countries, the ratio of total bonds outstanding to GNP is much lower in Korea--39 percent in Korea, 60 percent in Germany, and 66 percent in Japan.[3/]

8.22 The Korean bond market has a narrow investor base. As was shown in Table 8.4, individual investors represent less than 10 percent of the total, and a dominant share of outstanding bonds is held by a relatively small number of financial institutions and institutional investors. The dominance of financial institutions as primary bondholders is virtually common across countries, but its degree varies widely. On the basis of 1990 figures, the share of Korean financial institutions was 87 percent, considerably higher than the United States (61 percent), Germany (50 percent) and Japan (73 percent).[4/] The single largest group of Korean bondholders is investment trust companies, were financial condition has

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[3/] Source: Bank of Korea, Economic Planning Agency (Japan), Tokyo Stock Exchange, and Deutsche Bundesbank.

[4/] Figures are based on flow of funds data prepared by central banks of the respective countries.

deteriorated in recent years.[5]/

8.23 The maturity structure of fixed-income securities, particularly corporate bonds, is concentrated in the short-end of the spectrum. Most issues have maturities shorter than 3 years, and few exceed 5 years. Long-term corporate bonds are virtually non-existent in Korea, contrasting to industrial markets where long-terms bond issues support corporate fixed investments. As a result, there has been no development of meaningful yield curves that provide a basis for efficient investment and financing decisions.

8.24 Guaranteed bonds dominate the fixed-income securities market for corporate bonds, let alone public bonds that are guaranteed by the Government. Most corporate bonds are issued under the umbrella of financial institution guarantees. The credit rating system for corporate borrowers (except for large conglomerates) is not yet well established, and public confidence in corporate ratings assigned by rating agencies is lacking. The reliance of corporate bond issues on guarantees also raises concerns about potential wide-spread repercussions of adverse financial conditions at major commercial guarantors.

8.25 There are very limited types of instruments available in Korean bond markets. Straight bonds represent almost all of the new corporate bond issues in recent years; only a little over 1 percent of the 1991 total was convertible bonds. The lack of diversity in the type of fixed-income securities further limits spontaneous investment by the general public. Derivative securities, such as options and financial futures, are not currently offered in Korea. These contingent instruments could facilitate the growth of fixed-income instruments, as the proper use of derivatives can help improve the management of the portfolio comprising underlying securities.

8.26 During the 1980s, the corporate bond yield gradually declined to 12.6 percent in 1987. Since then, excessive investments (some speculative in real estate) and the associated high demand for credit pushed the yield up to almost 19 percent in 1991. Entering the first quarter of 1992, however, interest rates started to fall modestly, reflecting lower expected inflation as a result of tight fiscal and monetary policies to contain rising inflation in Korea. Recent empirical studies show that yields on Korean corporate bonds are most closely linked to consumer price indexes; for every one percentage point change in consumer price index, bond yields change roughly one-half a percentage point.

8.27 Bond yields continued to decline since the second half of 1991, as the sluggish performance of stock and real estate markets resulted in substantial new investment funds into bond markets. Recent government statistics show that as much as W 10 trillion of new investment has been

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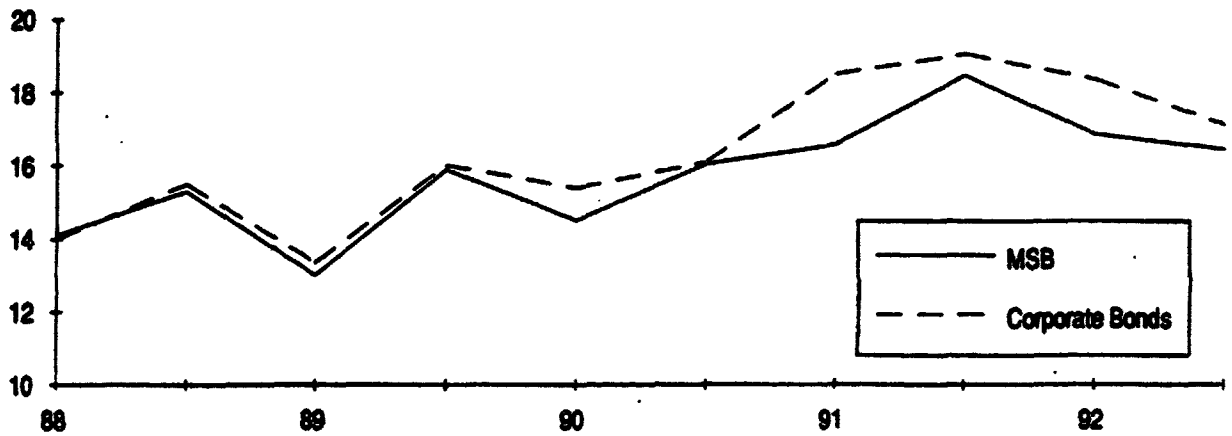
[5]/ The Korean government envisages a special rescue financing for investment trust companies in the order of W 3 trillion at a subsidized rate of 3%. The planned financing from the Bank of Korea is intended to revive these financially depressed companies whose role as leading institutional investors has been hampered by financial problems.

added to bank trust accounts and other vehicles targeted at fixed income securities for the first half of 1992. Compared with this sizable increase in investment flows, changes in market yields appear to be relatively modest, exhibiting the downside rigidity of interest rates in Korea.

8.28 It is interesting to observe that over the 1988-92 period, the spread between secondary market yields on government bonds and corporate bonds has generally widened (see Chart 8.2). The rise in the premium attached to corporate bonds may have reflected, among others, heightened corporate default risk under deteriorating macroeconomic conditions. Although the term structure of interest rates is not well established in Korea, the current yield curve is largely upward sloping; for corporate bonds, the maturity premium for a 5-year bond is about 100 basis points over a comparable bond with a one-year maturity.

Chart 8.2: Korea - Yield Structure of Korean Bonds, 1988-92
(Percent)



Source: Daewoo Securities Co.

C. Bond Markets - International Experience

8.29 Fixed-income securities markets in major industrial countries are considerably larger than that in Korea, not only in absolute terms but also in relation to the size of the economy. As shown in Table 8.5 below, for example, U.S. government bonds outstanding (as of October 1, 1992) amounted to US$1.77 trillion or 31.2 percent of GNP, compared with US$42.4 billion of government bonds or 15.7 percent of GNP in Korea.

Table 8.5: G-5 Government Bond Markets
Capitalization and its Ratio to GNP

Country	Capitalization (in US$ million)	Capitalization GNP (%)
United States	1,771,950	31.2
Japan	700,959	19.2
Germany	426,017	24.7
France	252,372	19.8
United Kingdom	215,319	20.0
Korea	42,400	15.7

Note: As of October 1, 1992 for market capitalization figures, and end-1991 for GNP data.

Source: Salomon Brothers (for bond markets); IMF (for GNP).

8.30 The Japanese yen bond market--perhaps the most useful industrial country comparator for the Korean bond market--is the second largest in the world, exceeded in size only by the U.S. market. It is roughly 40 percent of the total capitalization of the U.S. bond market and almost twice as large as the German market, including all types of publicly offered bonds. The Japanese government bond market expanded rapidly in the 1980s, with the introduction of primary market reforms and derivative instruments. The secondary market for Japanese government bonds expanded dramatically in the mid-1980s, after banks were permitted to trade seasoned public bonds in short-term trading accounts in 1984. In addition, the introduction of the government bond futures market in 1985 facilitated sophisticated arbitrage transactions. Ten-year government bonds are by far the most actively traded fixed-income instrument in the Japanese market. Market volatility and turnover have declined in recent years, due partly to the growing conservatism of investors. The non-government yen bond market has remained illiquid relative to its government counterpart. A series of market deregulatory measures has prompted liquidity and arbitrage trading in the money markets.

8.31 Japanese government bonds are distributed through both auctions and a fixed underwriting syndicate, which consists of major securities houses, banks and insurance companies. In response to foreign requests, the Japanese Ministry of Finance introduced a price-competitive auction system for ten-year government bonds in 1989 through which 40 percent of all new issues are distributed, with the remaining portion allotted to the syndicate. The share was subsequently raised to 60 percent in 1990 and is expected to increase to 100 percent in the future.[6/] In recent years,

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[6/] For further details of the Japanese bond market, see "A Primer on Yen Fixed-Income Markets," Salomon Brothers, June 1992.

the net issuance of government bonds has declined as a result of the Government's efforts to reduce the fiscal deficit. About one-fourth of new government bonds are placed with public institutions (such as the postal savings system) each fiscal year.

8.32 The OTC market dominates the trading of Japanese government bonds, although bonds with an original maturity of 10 or 20 years are also listed on the exchanges. Traditionally, the buy-and-hold investment pattern of Japanese investors in high-coupon bonds kept the liquidity of these bonds low. However, the accounting change in 1989 required banks to include capital gains from bond transactions in operating profits (i.e., the key measure of bank profitability), which fostered a shift in bank portfolio preference from current income to total rate of return. In addition to the growing conservatism on the part of investors, market-inherent and institutional factors are restricting activities in the Japanese secondary market. But the secondary market trading may expand in the future because, for example, insurance companies are expected to trade public bonds in short-term trading accounts by fiscal 1994. Derivative securities available in the Japanese bond market include long-term government bond futures (listed with the Tokyo Stock Exchange since 1985), options on government bond futures (listed with the Tokyo Stock Exchange since 1990), and OTC options on yen cash bonds (since 1989).

8.33 Among the developing economies in Asia, however, Korea leads the primary bond market activities and tops the size of fixed-income securities outstanding (see Annex Table C.6). But its secondary market turnover is much lower than in Taiwan, Singapore, or Hong Kong (see Annex Table C.7).[7/]

8.34 A total of US$64 billion (equivalent) of fixed-income securities was raised in Korean markets in 1991, substantially larger than in other neighboring Asian developing countries. Of this amount, government bonds and corporate bonds represented a roughly equal share. As discussed earlier, the growth in the primary bond market was facilitated by the government policy toward expanding MSB issues and encouraging corporate bond issues by deregulating the yields on new corporate bond issues. The GOK also allowed commercial banks to issue certificates of deposit so that the proceeds could be used to purchase corporate bonds. Primary bond market activity in Korea was supported by rising private placements through deposit money banks authorized lately for underwriting fixed-income securities.

8.35 Malaysia raised a little over US$2 billion (equivalent) in its domestic bond market in 1991. Malaysian Government Securities (MGSs) accounted for about two-thirds of the total, with the remainder issued in other forms, including Bank Negara Malaysia (BNM) notes and corporate bonds. In recent years, the BNM has offered a wider range of maturities to meet different investor preferences. Short-term securities with maturities of less than five years accounted for only 14 percent,

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7/ For a more detailed comparison of bond markets in major Asian developing countries, refer to "Fixed-Income Securities Markets of Six Dynamic Asian Economies," by S. Ghon Rhee, OECD, September 1992.

contrasting with the maturity structure of Korean bonds. Medium-term securities (of 8 years' maturity) and long-term bonds (of up to 21 years' maturity) represented 23 percent and 63 percent, respectively.

8.36 Hong Kong has a very small fixed-income securities market with a total outstanding of about US$1 billion (equivalent), representing a tiny fraction of the total market capitalization of its equity securities amounting to more than US$120 billion (equivalent). This is in sharp contrast with Korea, where the total fixed-income securities outstanding reaches almost the level of the total capitalization of its equity market. Government bonds have a maturity of two years, but the authorities plan to diversify the maturity structure.

8.37 Like Hong Kong, the size of primary bond markets in Taiwan and Thailand is very small, compared with their respective stock markets. Long-term debt securities in Taiwan amounted to US$17 billion (equivalent) as of end-1991, with the government bond sector representing a major share (more than three quarters of the total). The bond market in Thailand, with a total outstanding value of almost US$6 billion (equivalent), is completely dominated by government bonds.

8.38 The relative size of fixed-income securities markets, as measured by the ratio of aggregate bonds outstanding to GNP (based on market value as of end-1991), varies considerably among developing economies in Asia. The ratio is the highest in Malaysia (59 percent), and the lowest in Hong Kong (a little over 1 percent). Korea's ratio reaches almost 30 percent, followed by Taiwan (9.2 percent) and Thailand (7.2 percent). As noted in the preceding section, these ratios are much lower that those in major industrial countries: for example, Japan (66 percent) and Germany (60 percent). Moreover, these are also in drastic contrast to the comparable ratios for the equity markets; the ratio of total stock market capitalization to GNP ranges from 172 percent in Hong Kong to 35.5 percent in Korea.

D. Structural Impediments to Korean Bond Market Development

8.39 The structural and institutional weakness in Korean bond markets must be viewed from the broader perspective of macroeconomic policies and their interactions with financial systems and markets. First and foremost, government policies on interest rates directly affect the activities in bond markets. Improvement has been made, especially since the Government began to implement partial deregulation of interest rates in 1988, and more recently in 1991.[8/] But the prospect for further development of fixed-income securities markets in Korea is elusive, unless rates are expected to be determined by autonomous market forces.

8.40 The discrepancy between the primary bond rate and the secondary

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[8/] In November 1991, interest rate deregulation measures were expanded to several financial products. They include short-term instruments such as CDs and large RPs, and corporate bonds with maturities of longer than 2 years.

market yield has been a source of distortion in the Korean bond market. Unlike industrial markets where rates applied to new issues are largely determined by competitive bidding, below-market rates are artificially assigned to new government bonds by the monetary authority, in order to reduce the fiscal burden. The rate difference has been most pronounced in the case of MSBs, which are absorbed mostly by financial institutions through the Government's compulsory allotment. In fact, almost 70 percent of all bonds issued in Korea (based on 1990 statistics) were absorbed through non-voluntary demand. Government intervention is still prevalent in the market for corporate bonds, even though their yields have been liberalized. The artificial yield differential and irregularities affecting demand for new bonds has created an environment that limits expansion of the investor base in the bond market.

8.41 Existing regulations limit flexible supplies of fixed-income securities. Aside from government bonds, new issues of which are subject to prior approval from the Assembly, the size of new issues of certain financial bonds (e.g., industrial financing bonds issued by KDB) has to be agreed upon by the Assembly. Therefore, once the annual new issue size has been determined, it is difficult to alter the supply of those issues even if market conditions warrant such changes. The supply of corporate bonds is administered de facto by securities authorities (ultimately MOF) on a monthly basis. These controls and institutional rigidities often induce supply-demand imbalances in the bond markets, resulting in the failure of the market to reflect conditions of the real economy and credit and interest rate trends.

8.42 Compared with the substantial growth in the primary markets, the institutional framework and trading system in the secondary bond markets remain rudimentary. Bond prices are often set by a handful of large institutional investors, and systematic bid-offer price quotes are not available electronically. Illiquidity causes large spreads between bid and asked prices, coupled with commissions, resulting in prohibitively high transactions costs for individual investors. Furthermore, price information on OTC trades is often not publicly available.

8.43 The financial liberalization and financial sector reform plans leading to market-determined interest rates will be a crucial first step towards attaining growing and properly functioning bond markets in Korea.[9]/ Aside from supportive macroeconomic and deregulation measures, there are several specific areas where improvements can be made. The development of securities markets depends on the deepening and broadening of the markets. This means first that the investor base should be expanded to promote more competitive and transparent bond market conditions. More active participation from not only individual investors but also long-term oriented investors like life insurance companies and pension funds should provide greater stability to bond markets.

8.44 An important missing element in Korean bond markets is the

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[9]/ Related issues of financial sector reform and liberalization, including interest deregulation, indirect monetary control, money market development, and liberalization of foreign exchange markets, are subject to separate coverage.

presence of the foreign sector. In industrial countries with globalized financial markets, foreign investors hold roughly 10 percent of domestic bond instruments. The Korean bond market is currently closed to foreign investment, except for a very nominal amount through international investment trusts managed by domestic institutions. The participation of foreign investors will help broaden the domestic bond market. In addition, Korean corporations should be further encouraged to issue bonds (including convertibles) in overseas capital markets.[10]/

8.45 Likewise, the type of corporate bonds must be diversified. There should be more corporate bonds issued without guarantees from financial institutions. Guarantees often retard direct market access by issuing entities, and prolonged dependency on guarantees is detrimental to the establishment of a corporation's own creditworthiness in the market place. The heavy reliance by corporate bonds on guarantees means that bond instruments become almost indistinguishable (from the investor's point of view) from financial products issued by the institutions providing the guarantees, which also makes it impossible for the market to differentiate corporate bonds in different risk classes. For the bond market to develop as an efficient intermediator of risk capital, increasing the issues of non-guaranteed bonds should be encouraged with appropriate prudential guidelines. In this connection, the accountability of the rating agencies needs to be strengthened.

8.46 A characteristic of bond markets, which distinguishes this market from money markets, is that bond markets can intermediate long-term funds. As discussed before, the maturity of corporate bonds in Korea is confined largely to 3 years or so. Considering that Korean corporations rely increasingly on short-term indirect financing (from commercial banks),[11]/ longer-term bond issues must be promoted, along with appropriate pricing of maturity premiums. Increasing the usage of hybrid securities, such as convertible bonds and bonds with warrants, will not only help deepen the bond market, but also improve the highly-leveraged corporate capital structure in Korea.

8.47 Institutional reforms designed to improve the efficiency of bond markets should be another important task. A transparent pricing system, with frequent and continuous public disclosure, will enhance public confidence in the secondary market. A standardized and computerized price quote mechanism would improve liquidity. In this connection, lessons could be learned from the development of, for example, the NASDAQ system in the United States. More fundamental in this regard is the establishment of an adequate dealer system to remove price distortions in the primary bond markets.

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[10]/ See Annex Table A.4 for a summary of overseas convertible bonds and bonds with warrants issued by Korean companies.

[11]/ Recent Bank of Korea flow of funds statistics show that the proportion of indirect financing has been on the rise: 36% in 1989, 40% in 1990, and 54% in the first half of 1991. For the same period, domestic direct financing has declined from 54% to 35%.

E. Issues Involved in Bond Market Liberalization

8.48 The first priority of the Government should be on the improvement in the functioning of domestic bond markets. As a first step, the Government should consider creating a benchmark for interest rates by auctioning MSBs or Treasury bills. This would create a benchmark interest rate that could be used to peg other interest rates in the financial markets. Subsequently, interest rates on corporate bonds should be completely deregulated and corporations should be allowed to issue non-guaranteed bonds based on market determined rates. Credit rating agencies should be encouraged to issue ratings based on the assessment of credit risks to foster the development of the bond market. Regulatory control in the form of disclosures and reporting should be simultaneously strengthened. Once the domestic bond market is deregulated and is functioning well, the Government should consider opening the market to foreign investors. The internationalization should be implemented within the context of broader monetary and foreign exchange rate policy liberalization and the proposed sequencing of which are discussed in Chapters IV and VI.

F. Options for Bond Market Liberalization

8.49 There are basically two options for effecting the bond market opening: step by step or big bang. In the case of Japan, the internationalization of the bond market was brought into effect gradually throughout the 1970s. The complete opening took place in 1980, after several years' experience of consecutive current account surpluses and the rapid growth of domestic financial markets. Three conditions are believed to have contributed to its success: a stable and sound macroeconomic environment, sufficiently competitive domestic institutions, and a gradual but effective implementation.

8.50 In contrast, Spain took a different approach and moved in a much faster track. Since the reforms of the government bond market in 1987, the Spanish bond market has become quickly internationalized. The admittance of the peseta into the European exchange rate mechanism (ERM) in 1989 greatly facilitated its internationalization. Non-residents are estimated to currently hold more than 20 percent of the total outstanding in the Spanish government bond market.

8.51 The desirable policy option for Korea appears to lie between these two extremes. Market opening measures could be phased in over a period of 3-4 years. The first step should involve a partial opening of domestic bonds, confined to selected instruments in government securities such as MSBs or treasury bills. Given the lack of an established yield curve, foreign investors would most likely be interested in investing in short-term government securities. The convertible corporate securities would be another logical choice once the domestic market is deregulated and the issues are allowed to be priced based on the credit risks. Closed-end bond funds could be explored at this initial stage.

8.52 The Korean authorities should also consider developing domestic derivatives markets--such as futures, forward, swaps, and options--to

support effective management of financial risks associated with international securities transactions. The institutional capacity to deal with contingent instruments should also be fostered. At the same time, Korean firms should be encouraged to tap international bond markets, leading to the issuance of Won-denominated Eurobonds.

G. Summary and Recommendations

8.53 Korean securities markets have grown significantly through the 1980s. The excellent macroeconomic performance and phenomenal growth in new equity securities, especially during the second half of 1980s, made the KSE one of the largest emerging bourses. Although market activities have become sluggish over the last two years, the Korean stock market now ranks thirteenth in the world in terms of market capitalization.

8.54 In the process of domestic market growth, Korean authorities have gradually taken measures to open the stock market for foreign investment. Since investment trust funds for non-residents were first established in 1981, Korean trust companies have set up a number of international investment trusts. The introduction of the Korea Fund, a pioneer country fund, in 1984, brought a series of country funds for international investment in Korean equities on the KSE. Finally, the stock market opening for direct purchase by foreign investors became effective in January 1992, attracting nearly US$800 million for the first three months in 1992.

8.55 The impact of the market opening on Korea's domestic economy has been relatively inconsequential, erasing some of the concerns about the internationalization. Although observations are too limited to warrant definitive judgement, the foreign investment flows have not destabilized the domestic market. The market opening was an important milestone, but many restrictions remain. There appears substantial room for improvement in foreign ownership limit, regulatory arrangements (including capital gains tax), and administration and procedures.

8.56 The Korean bond market has also grown rapidly in recent years, but the growth is confined to the primary market for relatively few issues. New bond issues are dominated by MSBs and guaranteed corporate bonds. The secondary bond market remains largely underdeveloped due to interest rate control and the control of capital issues by the Government. There is no benchmark for interest rates in Korea, and the bulk of government securities and MSBs are allocated.

8.57 The first priority of the Government should be to develop the domestic bond market. This will require both policy and institutional changes. At the policy level the Government will need to: (i) deregulate interest rates on government securities starting through the issuance of the MSBs at market rates. Auctioning of MSBs may be the most efficient way to achieve this. In this connection, the related issues of the profitability of the BOK and the policy loans will need to be addressed in Chapters IV and V; (ii) deregulate the interest rates on corporate bonds and allow the market to determine the interest rate for each issue based on the credit risk and rating assign by the credit rating agencies. In

this connection, the credit rating agencies should be developed further. Guarantees of the securities should be voluntary and the guarantee fee should be market based; (iii) deregulate the control of capital issue by allowing the corporate sector to issue securities based on market considerations; (iv) a network of primary dealers should be activated for making markets in the government securities; (v) the clearing and settlement system for corporate bonds should be improved; and (vi) information on the bond market for investors should be improved.

IX. THE PROPOSED FINANCIAL SECTOR REFORM AND ITS SEQUENCING

Introduction

9.1 The Korean economy has been one of the fastest growing economies in the world. As discussed earlier, the Government has used the financial sector to support its industrial policy and the development of the real sector. The success of the interventionist policy was ensured by its dependence on market signals for the development of the real sector. However, the financial sector was burdened with excessive interest rate controls, policy loans, ownership of banks by the Government, and undue interference in the management of financial institutions, especially banks. As a result, the development of the Korean financial sector was retarded and substantially lagged behind the real sector (Chapter II).

Earlier Attempts at Financial Reforms

9.2 The need to revitalize the financial sector so that it could more effectively serve the economy was appreciated by the Korean authorities. This recognition led to adoption of a financial liberalization program in 1979. Interest rate ceilings were adjusted upward in 1979 to yield positive real interest rates, though this move was frustrated by the acceleration of the inflation rate in 1980 and 1981, following in the wake of the oil price crisis. In 1981, banks were privatized and preferential lending rates were abolished; commercial paper was allowed to be issued for NBFIs at market interest rates. In 1981, the band system for bank lending rates was introduced and further widened, together with the liberalization of short-term inter-bank rates and the introduction of certificates of deposit for banks in 1984, Cash Management Accounts by short-term finance companies and household trust accounts, and the paying of market interest rates was introduced; primary market interest rates were freed from formal restrictions on corporate bonds and CDs. In 1987, securities companies were permitted to issue the bond management fund, similar to but more restrictive in asset management than money market funds in the United States.

9.3 With all these liberalized measures, however, progress was generally half-hearted and faltering. The authorities feared the impact of higher interest rates on the business sector, which made them intervene whenever they thought the market interest rates overshot the level perceived to be sustainable. Although the deregulation program was de facto abandoned, the limited experiment during this period made the authorities and the market participants aware of the positive impact of financial deregulation. This set the stage for a fresh impetus for deregulation by the authorities in 1988. Coincidentally, these moves towards financial deregulation were induced by the notable improvement in macroeconomic conditions in Korea during a major part of the 1980s, and by high savings in excess of domestic investment which narrowed the disparity between the regulated and free market rates, i.e., curb market rates.

9.4 A somewhat bolder step toward financial liberalization was taken in December 1988, when most bank and non-bank lending rates and some long-term deposit rates were decontrolled, except for the rates on policy loans and short-term deposit rates--the latter on the grounds of preventing excessive competition among financial intermediaries. However, this measure was not allowed to run its full course. As soon as the interest

rates moved upward from the repressed level in response to deregulation, the authorities clamped down on the rates, giving tacit consent to collusion among the financial institutions in fixing interest rates. This was achieved through "window guidance".

The Government Plan for Interest Rate Deregulation

9.5 It is realized by the authorities that local banks have been greatly handicapped in conducting their operations competitively, while foreign banks are not subject to interest rate ceilings, and NBFIs have been given greater freedom in regard to interest rate determination. Further, it was felt that a global financial environment has evolved in a manner that the Korean financial system has to strengthen its links with it in order to enhance the efficiency of credit allocation and savings mobilization. The Government, therefore, announced a plan in 1991 for gradually deregulating interest rates and increasing the competitiveness of the banks. The plan began to be operative in November 1991, and was expected to be fully implemented by 1997. Subsequent discussions with the authorities indicated that the process of interest rate deregulation might be extended beyond 1997 by a couple of years, depending upon several unexpected developments. The main elements of this plan are summarized in Table 9.1.

Table 9.1: Korea - Schedule for Interest Rate Deregulation

	Loans	Deposits	Bonds
PHASE 1 (second half of 1991-first half of 1992)	* Bank overdraft loan * Real commercial bill discounts excluding those rediscounted by BOK * Short-term finance companies' commercial paper and trade bill discounts	* Negotiable bank CD * Short-term finance companies' sale of large-size commercial papers and trade bills * Bank's sale of large-size real commercial bills * Large-size RP * Some long-term deposits	* Corporate bonds with maturities over 2 years
PHASE 2 (second half of 1992-end of 1993)	* All loans of banks and NBFIs, excluding loans financed by government and BOK rediscount	* Long-term deposits with maturities over 2 years	* Corporate bonds with maturities less than 2 years * Bank debentures with maturities over 2 years
PHASE 3 (1994-1996)	* Loans financed by government and BOK rediscount	* Deposits with maturities less than 2 years (except demand deposits) * Further deregulation of short-term market oriented products * Introduction of financial products linked to market rate such as MMC	* Bank debentures with maturities less than 2 years * Monetary stabilization bonds (MSBs)
PHASE 4 (1997-)		* Remaining short-term deposits and demand deposits	* All government and public bonds

Source: MOF Bulletin, No. 97, September 1991.

9.6 Though the deregulation policy was formally launched in the second half of 1991, its implementation has been more notional than real. Formal regulation of rates on bank overdraft loans and commercial bills, corporate bonds with maturities over two years, and long-term deposit rates have been removed. But in effect, the actual rates charged on all these assets and liabilities continued to be subject to window guidance. Thus, there was no de facto deregulation of interest rates due to the reasons referred to earlier in this chapter. The government plan for financial sector reform has several positive features which may carry the Korean financial system to greater efficiency and growth. However, the implementation of the plan is contingent upon certain macroeconomic conditions and therefore the plan is generally perceived by domestic market participants and the international community (especially its major trading partners) as being too halting and lacking credibility. In order for the plan to be credible, it needs to have a specific timetable and be made known to all market participants so that they can operate freely in a deregulated environment.

The Case for Financial Sector Reform

9.7 The Korean economy has seen substantial liberalization in the real economy, while the path it has taken in freeing controls on the financial sector has been cautious and measured. The reforms that have been undertaken during the past decade have improved the efficiency of the financial system in many respects. Despite this progress, however, many distortions remain, and these have influenced the structure of the financial system, its ability and efficiency in mobilizing and intermediating savings, and the efficacy of monetary policy. There is a need for further reform of the financial system for the following reasons. First, the Korean economy is now the tenth largest in the world and is approaching developed country status. As a result, the Korean financial market is a part of a global market system and the major trading partners would naturally demand reciprocity in accessing Korean markets. Second, the direct control of the system which has served so well in the past has now become too cumbersome and is not efficient enough to meet the financing of a more sophisticated and internationalized economy. Continuation of control is likely to lead to misallocation of resources and increase distortions in the system. Third, the macroeconomic condition in Korea is stable and ideal for implementing accelerated reforms (Chapter II). Fourth, as the financial system becomes large and complex, there is no other option but to move away from direct monetary control to indirect monetary control procedures. This would mean that the interest rate deregulation (especially on the government securities and MSBs) must take place sooner rather than later. Fifth, Korea needs a more competitive and innovative banking sector which can service the financing needs of the economy at home and abroad. Therefore, it is essential that full deregulation of the domestic financial system take place sooner rather than later.

Perceived Risks of Accelerated Financial Reform

9.8 Korea has thus far made very good progress in reforming its financial sector. However, the Korean authorities are reluctant to accelerate the reforms for the following concerns: (a) macroeconomic stability; (b) health of the banking system; (c) limited asset/liability

management skills in the banks; (d) over indebtedness of Korean companies; (e) excess demand for credit; and (f) crowding out by the Chebols. These are discussed below.

9.9 Macroeconomic Stability. The Korean authorities fear that the deregulation of interest rates and rapid financial sector reform would adversely affect macroeconomic stability. However, the macroeconomic conditions in Korea today are highly favorable to accelerating the pace of financial reform. Although the current account shows a deficit, it has fallen sharply this year, and the deficit is sustainable since adequate flows of foreign financing are easily available. Indeed, it is arguable that Korea should be a net capital importer, when its future growth would depend on greater capital intensity of production. Substantial liberalization has occurred in the real sector. Industrial policy is now less interventionist and sector-specific. Similarly, the trade regime is now less protectionist. Tariffs have been substantially lowered and the coverage of quantitative restrictions reduced. Korea is free from severe macroeconomic imbalances which threatened the financial liberalization in Southern Cone countries and some Asian countries like Indonesia and the Philippines.

9.10 Health of the Banking System. The domestic banks are reportedly saddled with a high proportion of non-performing loans which are by and large policy loans (Chapter V). Helped by the buoyancy of the stock market and favorable economic conditions during 1987-89, the banks in Korea have been enhancing their capital base and reduce non-performing assets (Chapter VII). Furthermore, the interest rate spread of 4.53 percent is much wider than in industrial countries like Japan and the United States.[1/] Both of these factors should be expected to provide more than an adequate cushion against the risks of non-performing loans. If, however, such loans are considered to be a formidable barrier to interest rate deregulation, the authorities should move more expeditiously to remove policy loans from the balance sheet of the banks.

9.11 Asset/Liability Management Skills. It is believed that deregulation of interest rates on the liabilities of commercial banks without being able to adjust returns on their assets would disadvantage them vis-a-vis the foreign banks and NBFIs. However, the evidence seems to suggest that it is not such a major problem as is generally believed. However, this concern can be accommodated in the interest rate deregulation plan by allowing ceilings on interest rates on short-term deposits at the beginning, and their gradual removal later within a specified time.

9.12 Over Indebtedness of Korean Companies. Korean companies are highly leveraged. The debt-equity ratio for all manufacturing firms in 1991 was 3.09:1, and even the lowest in recent years--in 1989--was 2.54:1. This compares with 2.27:1 in Japan and 0.83:1 in Taiwan, China. However, the Korean firms have been replacing bank loans with securities. In 1991, the ratio of securities in total financing rose to 55 percent compared with 27 percent in 1987. Interest rate liberalization will further increase the incentive for equity financing and therefore reduce the leverage level of Korean firms. Furthermore, there is a misconception

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1/ Sung-Hee Jwa, "Korea's Interest Rate and Capital Controls Deregulation: Implications for Monetary Policy and Financial Structure," July 1992, Korea Development Institute.

that business firms pay the regulated interest rates on their borrowings. Banks generally evade the regulations by asking borrowing firms to maintain compensatory balances, utilizing other facilities to raise the effective cost of the borrowed funds compared to the market rates. When bank credit is available at much below market interest rates and access to capital market for raising equity is rationed, the corporate sector has little incentive to reduce its leveraging. Therefore, the solution is to deregulate interest rates and allow firms unrestricted access to the capital markets with appropriate disclosures to protect the investing public.

9.13 Excess Demand for Credit. It is argued that demand for credit in Korea is interest inelastic, particularly the credit demand for real estate. It is argued that under such conditions, if interest rate determination is left to market forces, rates would skyrocket and thus impede investment in the manufacturing sector and the growth of the economy. The interest inelasticity of credit demand appears largely based on the observation that at controlled rates there is competition for funds. The existence of excess demand at these rates is by itself not surprising. The intensity of competition for credit reflects in large measure the extent to which policy loans to preferred sectors siphon off credit. As a consequence, less credit is available for other sectors. Moreover, during the economic boom of the late 1980s, the strong demand for credit was fed by spiralling prices in the real estate and stock markets. Given that the economy has now returned to slower growth, and in particular the real estate and stock market booms have abated, credit demand appears to have weakened considerably. For instance, the current yield on three-year corporate bonds (October 1992) is 13.75 percent--the lowest in almost four years and down from almost 20 percent a year ago, and 15.5 percent as recently as September 1992. Therefore, the economic environment appears to be ideal to move decisively on deregulation.

9.14 Crowding-out by the Chebols. The concern here is that the priority sector borrowers such as small and medium industries and agriculture will be deprived of credit from the banking sector, and the banks would prefer to lend to the Chebols. This concern, however, can be addressed through the prudential regulations and bank supervision. An exposure limit by company, group and sector should be established and tightly monitored. Specialized banks could continue to meet the financing needs of the priority sectors.

Benefits of Faster Financial Reform

9.15 If the GOK can implement a credible financial sector reform, the following main benefits would accrue. The first would be the potential improvements in the efficiency of the financial system in intermediating savings. There are several indicators that point to inefficiencies in many segments of Korea's financial system, which raise the costs of financial intermediation. One of the indicators is the operational inefficiency of Korean banks compared to their counterparts in Japan and the U.S. In 1990, labor productivity in Korean commercial banks, whether measured in terms of assets, loans or deposits per employee, was less than a tenth of the levels in Japanese banks. Moreover, limited competition within the Korean banking sector meant that interest rate margins (the difference between loan and deposit rates) were about twice their levels in the U.S. and more than three times as large as in Japan. So it is not

surprising to hear a recurrent complaint is that borrowing costs are too high.

9.16 Another measure of inefficiency in intermediation is the continued segmentation of financial markets. As noted earlier, there is reason to believe that the variation of risk-adjusted interest rates across different groups of borrowers has narrowed since the 1970s. But the Government continues to play a substantial role in allocating credit through requirements that banks and NBFIs allocate a prescribed share of new credit to preferred sectors and BOK's automatic rediscount mechanism for loans to some sectors (Chapter VI). This means that financial markets still remain segmented to a significant degree, with the pricing of loans reflecting regulatory requirements rather than lenders' evaluations of the riskiness of different lending opportunities.

9.17 Actions to deregulate the financial system in several areas would encourage greater efficiency. Interest rate deregulation would encourage commercial banks to develop their expertise in asset and liability management. Even partial decontrol of deposit rates would allow them to compete more effectively with NBFIs in mobilizing funds. If combined with a relaxation of the sectoral lending requirements that apply to banks, it would reduce significantly the regulatory disadvantage that banks currently face relative to NBFIs. By allowing them to tailor their interest rates and products to market conditions and risk characteristics, it would promote efficiency in their operations rather than forcing them to operate in effect as cost-plus providers of financial services. Reducing the volume of policy loans would also restrict the flow of preferential loans and thereby reduce segmentation.

9.18 The favorable impact of these changes on the efficiency of the banking system suggests that the rise in lending rates that follows interest rate decontrol may not be as large as is feared. Although difficult to demonstrate, it is probable that the large share of policy loans in total credit has meant higher interest rates than in a liberalized system for those without access to these loans. Those borrowers may well see a reduction in their borrowing costs.

9.19 As Korea shifts from a surplus to a shortage of labor, among the most important issues is whether to continue to restructure the industrial sector so as to build comparative advantage based on technology rather than cheap labor. Such a shift is already underway, with the share of light industry in manufacturing output having shrunk by about 5 percentage points in 1989-91 compared to 1985-87. But this transition has not been easy, in part because capital remains expensive to most Korean firms--even while labor costs are ri . If financial reforms succeed in raising the efficiency of domestic intermediation and in broadening the access of Korean firms to external capital, industrial restructuring could occur much more smoothly, which could raise Korea's growth rate.

Proposed Financial Sector Reforms and Sequencing

9.20 In light of the above analysis, it is suggested that the GOK consider modifying its deregulation plan in regard to its scope, sequencing, and speed. The suggested changes are indicated in Table 9.2.

9.21 The main thrust of the proposed reform is that the deregulation of the domestic financial markets and current account should take place before the opening of the capital account. Such sequencing has worked very well in many countries such as Malaysia and Indonesia.2/

9.22 The rationale for the suggested changes in the scope, sequencing, and speed of the deregulation plan and its implementation are elaborated as follows. First, it is recommended that the period of reform be compressed for two reasons: (i) the momentum of deregulation will be lost if the period of change is too long; and (ii) the globalization of financial markets worldwide and the size of Korean economy create a need for a more rapid adjustment. Second, deregulation of lending rates on loans of all financial intermediaries is proposed to take place in a short period of time, instead of the step-by-step approach adopted by the Government. The current effective lending rates are already higher than the regulated ones as discussed earlier in the chapter. Therefore, even if the loan interest rates increase as a result of deregulation, the overall cost to the economy and the corporate sector would not change materially. Recent experience in Thailand and the Philippines shows that the level of interest rates actually declined. Third, deregulation of interest rates on deposits (except for demand deposits) of deposit money banks is proposed to be carried out in steps on the grounds that removal of interest rates on all deposits in one go may lead to excessive competition among banks to increase their market share. Since the banks are generally not very well-versed with modern asset/liability management techniques and the level of non-performing assets of the banking system could be higher than the published figures, a sharp increase in their funding cost without the ability to adjust the returns on the existing loan portfolio of policy loans creates a potential risk of bank failures. Therefore, a gradual deregulation of deposit rates with a clear timetable for eliminating the ceiling will provide enough time for banks to prepare themselves to cope with the new environment. It is also recommended that the Government completely withdraw from direct or indirect management of financial institutions to enable the development of professional bankers. Prudential regulations and bank supervision are to be strengthened and are to replace direct controls.

2/ See "The Impact of Financial Reform in Malaysia," Messrs. Yusof, Hussin, Alowi, Sing, and Singh, Bank Negara, March 1992; "Indonesia: Financial Sector Report," Report No. 8159-IND, IBRD, May 10, 1990.

Table 9.2: Changes in the Scope, Sequencing, and Speed of the Deregulation Plan as Suggested in the Report

Phase	Loans	Deposits	Bonds	BOK	External Capital Account	Bank Supervision
Phase 1 1993	(i) Rates on all loans of banks and non-banks, excluding policy loans, should be freed. (ii) No window guidance.	Establish a single interest rate ceiling on deposits (except for demand deposits) of all deposit money banks in line with changes in market rates of interest.	(i) Rates on corporate bonds of all maturities and MSBs and T-bills when issued should be completely freed. (ii) Auction or market based method should be adopted for MSBs. (iii) Capital issue control to be liberalized. (iv) Bank guarantees of corporate bonds should be priced on credit risks. (v) Credit rating agencies to be strengthened to rate corporate paper issued on credit risk of individual issues.	Indirect monetary policy control through open market operations should be initiated on a modest scale. Credit controls through normal rediscounts (non-policy loans) and reserve requirements should be continued.	–	Begin the process of strengthening and unifying bank supervision function.
Phase 2 1994	Progressively reduce interest rate subsidy on policy loans by linking it to a market based benchmark rate.	–	–	Transfer policy loans off BOK books. Interest rate subsidies on any remaining policy loans to be progressively removed and volume reduced.	Purchases of bonds including government securities (MSBs and T-bills) by foreign investors should be permitted after interest rate deregulation has taken place.	Take necessary steps to strengthen bank capital, and accelerate adoption of OECD loan classification standards, and compliance with BIS capital adequacy regulations.
Phase 3 1994-5	Continue reduction of interest rate subsidy on policy loans.	Ceiling on deposit rates should be raised (but not removed) to conform to other market interest rates.	–	Pursue vigorously the use of government bonds, MSBs, T-bills or other suitable paper for open market operations.	–	–
Phase 4 1996-7	Interest rates on all policy loans to be market determined.	Ceilings on all deposit (including demand deposit) rates to be eliminated in 1996.	–	No preferential discounting of policy loans.	Capital account to be open. Flexible exchange rate policy to reflect market conditions to be initiated.	–

9.23 Deregulation of interest rates on government securities and MSBs should be advanced to 1993. Issuance of MSBs or T-bills at market rates will create a benchmark for interest rates that can be used to price other financial instruments. Auctioning these securities will be an efficient way to achieve this. This will foster further development of money and capital markets and facilitate the transition from direct momentary control to indirect monetary control procedures. The BOK would then be in a position to conduct open market operations.

9.24 It is recommended that foreign investors should be allowed to invest in MSBs and T-bills once the interest rates on these instruments are deregulated. Foreign investors are generally interested in investing mostly in risk free and liquid financial instruments (i.e., government securities) in emerging markets. Foreign participation in the government securities market would impart breadth and depth to the bond market and encourage increasing domestic participation. This should also facilitate issuance of corporate bonds for foreign investors at a later stage. It is appreciated that the GOK has recently further liberalized foreign portfolio investment in the equity market and the specific timing of the opening of the bond market may be influenced by the magnitude of capital inflows from the opening of the stock market. The full liberalization of the capital account is left for the final phase when the banking system is fully competitive and efficient as a result of accelerated deregulation of the domestic financial system.

Concluding Remarks

9.25 Korea has achieved an economic miracle in a very short period of time, and it is now the tenth largest economy in the world. In the past, the GOK has used the financial sector as an instrument of industrial policy, and the main vehicles have been policy loans for the priority sectors and interest rate controls. However, the financial system, especially the domestic banking system, has substantially lagged behind the real sector in Korea and the financial systems in other ASEAN and OECD countries. There is a need to make the system more efficient and more market oriented. An accelerated financial deregulation is very timely and should be beneficial to Korea. The main thrust of suggested reform focuses on the deregulation of the domestic financial market and its institutions, with the objective of improving their efficiency so that they can effectively compete both at home and abroad. All the required ingredients for a successful reform appear to be in place, and what is needed is a strong commitment to reform and the will to carry out the reforms decisively. The risks involved in such reforms are relatively modest and manageable given the prevailing macroeconomic conditions in Korea and the very high level of administrative skill in the Government.

ANNEXES

Table A.1: Korea - Outstanding Policy Loans by Sources, 1976-91
(Percent)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Pref. Finance																
Government Fund	1.8	2.0	2.0	1.9	1.9	2.0	2.1	2.3	2.4	2.4	2.6	2.7	2.8	3.0	2.9	2.9
NIF	1.4	1.8	1.9	1.9	1.5	1.5	1.6	1.8	1.7	1.5	1.5	1.4	1.3	1.1	0.8	0.7
Credit to KDB/KEXIM	0.9	1.2	1.2	1.0	1.0	1.0	0.7	0.7	0.7	0.6	0.7	4.4	6.1	6.3	6.1	5.4
Foreign Exchange	4.0	4.7	7.4	9.2	9.9	8.5	8.0	6.9	6.0	5.2	5.4	7.3	6.9	6.5	6.7	6.6
Trade	5.4	5.2	5.9	6.5	6.6	6.7	5.7	5.8	5.3	5.0	5.0	3.2	1.5	1.4	1.6	1.5
Medium Industry	0.9	1.7	2.3	2.7	2.9	3.8	1.5	1.8	1.9	1.8	2.0	2.1	2.4	2.3	2.3	2.4
Agri/Fisheries	1.9	1.9	1.6	1.7	1.6	1.4	1.3	1.8	1.9	1.8	1.7	2.4	2.8	2.7	2.6	2.6
Housing	1.8	2.0	2.6	3.3	3.6	2.8	4.0	4.4	4.4	4.0	4.0	4.2	4.6	5.3	5.5	5.5
Other	5.3	4.3	4.9	3.1	2.4	3.0	3.2	3.4	3.7	4.3	6.3	6.9	7.6	8.5	7.9	5.0
Total	23.4	24.8	29.9	31.4	31.5	30.7	27.9	28.8	28.0	26.7	29.2	34.7	35.9	37.1	36.5	32.8
Other Pref. Finance	8.4	9.1	9.6	11.6	12.9	13.6	15.0	15.5	15.6	15.7	13.9	9.8	7.2	6.4	6.2	6.9
Total Policy Loans	31.8	33.9	39.5	43.0	44.3	44.3	42.9	44.3	43.5	42.4	43.1	44.4	43.1	43.5	42.7	39.7
Domestic Credit + KDB + KEXIM	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Note: Domestic credit adjusted to include assets of KDB and KEXIMbs calculated below. These figures are in billions of Won.

Domestic Credit	4857	5979	8722	11826	16778	22016	27529	31847	36059	42561	49496	57041	64099	79089	96888	118186
KDB Assets	3636	4728	5928	6624	8850	9714	10075	10789	12266	14991	15379	15347	16978	17525	23341	29212
KEXIM Assets	81	181	239	324	557	1008	2105	2923	4041	5159	3954	2783	2359	2214	2723	3819
Total	8554	10889	14889	18774	26184	32758	39707	45559	52365	62710	68829	75171	82936	98828	122952	151217

Note: Total preferential finance includes assets of KDB and KEXIM. To calculate current numbers, the total assets of the two institutions were added to domestic credit.

Source: National Statistics Office, Korean Economic Indicators, February 4, 1992.

Table A.2: Korea - Share of Policy Loans, 1976-1991
(Percent)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Pref. Finance																
Government Fund	5.7	6.8	5.1	4.3	4.3	4.4	4.8	5.1	5.5	5.6	6.0	6.0	6.5	6.9	6.7	7.2
NIF	4.5	5.3	4.9	4.5	3.5	3.4	3.7	4.1	4.0	3.6	3.6	3.2	3.0	2.4	2.0	1.6
Credit to KDB/KEXIM	2.9	3.6	3.0	2.3	2.2	2.3	1.7	1.6	1.5	1.5	1.7	10.0	14.2	14.5	14.3	13.6
Foreign Exchange	12.7	13.7	18.7	21.3	22.4	19.1	18.5	15.5	13.8	12.4	12.5	16.5	15.9	15.0	15.8	17.3
Trade	17.0	15.4	15.0	15.2	14.8	15.2	13.4	13.0	12.1	11.8	11.6	7.2	3.4	3.2	3.7	3.8
Medium Industry	2.8	4.9	5.9	6.4	6.6	8.6	3.4	4.0	4.3	4.2	4.7	4.7	5.6	5.3	5.5	5.9
Agri/Fisheries	5.8	5.5	4.1	3.9	3.6	3.2	3.0	4.1	4.4	4.1	4.0	5.4	6.6	6.2	6.2	6.6
Housing	5.7	5.9	6.5	7.8	8.1	6.4	9.3	9.9	10.2	9.5	9.3	9.5	10.7	12.2	12.8	13.9
Other	16.5	12.7	12.3	7.3	5.5	6.7	7.3	7.6	8.6	10.2	14.5	15.5	17.5	19.5	18.5	12.7
Total	73.6	73.0	75.6	73.0	71.0	69.4	65.1	65.0	64.3	62.9	67.8	78.0	83.3	85.3	85.5	82.6
Other Pref. Finance	26.4	27.0	24.4	27.0	29.0	30.6	34.9	35.0	35.7	37.1	32.2	22.0	16.7	14.7	14.5	17.4
Total Policy Loans	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Note: Other Preferential Finance represents finance to KDB and KEXIM but nets out the credit that appears in the Preferential Finance data.

Source: National Statistics Office, Korean Economic Indicators, February 4, 1992.

Table B.1: Korea - Estimation of Subsidy Provided by Policy Loans, 1980-91

Year	Outstanding Policy Loans (A)	Corporate Policy Rate (B)	Avg. Onlending Rate for Policy Loans (C)	Rate Differential (B-C)	Amount of Subsidy A*(B-C)	GNP (D)	Subsidy/GNP A*(B-C)/D	Government Expenditure (E)	Government Expenditure/ GNP A*(B-C)/E
1981	14,498	17.4%	15.0%	2.4%	348	45,528	0.8%	8,045	4.3%
1982	17,030	19.3%	12.5%	6.8%	1,158	52,182	2.2%	10,115	11.4%
1983	20,177	14.4%	10.0%	4.4%	888	61,722	1.4%	10,682	8.3%
1984	22,805	13.6%	10.0%	3.6%	821	70,084	1.2%	11,875	6.9%
1985	26,603	13.4%	10.0%	3.4%	905	78,088	1.2%	13,336	6.8%
1986	29,637	13.3%	10.0%	3.3%	978	90,599	1.1%	14,948	6.5%
1987	33,393	12.9%	10.0%	2.9%	968	106,024	0.9%	16,944	5.7%
1988	35,719	12.8%	10.0%	2.8%	1,000	126,231	0.8%	19,454	5.1%
1989	43,019	15.7%	10.0%	5.7%	2,452	141,794	1.7%	23,776	10.3%
1990	52,457	13.3%	10.0%	3.3%	1,731	171,488	1.0%	29,004	6.0%
1991	59,983	13.4%	10.0%	3.4%	2,039	206,027	1.0%	32,694	6.2%

Source: Bank of Korea, Monthly Bulletin; IMF, International Monetary Statistics, 1991.

Table C.1: Proceeds from Corporate Securities Offerings, 1980-91

Year	Stocks		Bonds		Total	
	Number of Issues	Amount (Bil. Won)	Number of Issues	Amount (Bil. Won)	Number of Issues	Amount (Bil. Won)
1980	53	171.1	465	963.7	518	1,134.8
1981	83	306.0	458	1,036.1	541	1,342.2
1982	69	276.9	744	2,112.2	813	2,389.0
1983	105	462.6	649	1,426.5	754	1,889.1
1984	121	479.1	872	1,804.1	993	2,283.1
1985	71	294.6	1,096	3,176.7	1,167	3,471.3
1986	126	840.8	900	2,728.9	1,026	3,569.6
1987	222	1,898.7	1,019	3,189.6	1,241	5,088.3
1988	410	7,770.1	1,063	4,244.3	1,473	12,014.4
1989	409	14,669.2	1,217	6,959.0	1,626	21,628.2
1990	205	2,917.8	1,776	11,083.6	1,981	14,001.4
1991	158	2,687.1	2,797	12,740.7	2,955	15,427.7

Source: Korea Securities Supervisory Board.

Table C.2: Offerings of Corporate Bonds by Type, 1985-91
(Millions of Won)

Year	Guaranteed				Non-Guaranteed				Mortgage	Total
	Straight	Convertible	With Warrants	Sub-Total	Straight	Convertible	With Warrants	Sub-Total		
1985	2,888,015	17,748	-	2,905,763	221,711	2,850	-	224,561	48,420	3,176,744
1986	2,411,929	-	-	2,411,929	297,780	-	-	297,780	19,162	2,728,871
1987	2,684,717	94,400	-	2,779,117	266,000	124,000	-	390,000	20,500	3,189,617
1988	3,823,820	318,200	49,000	4,191,020	11,300	19,000	-	30,300	23,000	4,244,320
1989	5,116,135	1,041,400	-	6,157,535	492,000	137,000	162,000	791,000	10,500	6,959,035
1990	8,584,096	613,600	-	9,197,696	1,791,859	78,500	-	1,870,359	15,500	11,083,555
1991	10,811,257	187,000	-	10,998,257	1,742,422	-	-	1,742,422	-	12,740,679

Source: Korea Securities Supervisory Board.

Table C.3: Offerings of Corporate Bonds by Company Size, 1985-91
(Millions of Won)

Year	Large-Sized Business			Small- & Medium-Sized Business			Total
	Listed Company	Registered Company	Sub-Total	Listed Company	Registered Company	Sub-Total	
1985	1,788,874	826,364	2,715,238	42,001	419,505	461,508	3,178,744
1986	1,364,482	821,090	2,185,572	59,400	483,899	543,299	2,728,871
1987	1,546,420	1,181,580	2,728,000	43,790	417,827	461,617	3,189,617
1988	2,331,100	1,342,930	3,674,030	81,300	488,990	570,290	4,244,320
1989	4,539,200	1,179,090	5,718,290	371,000	869,745	1,240,745	6,959,035
1990	6,385,699	1,957,657	8,343,356	982,300	1,757,899	2,740,199	11,083,555
1991	7,016,792	2,134,694	9,151,486	503,220	3,085,973	3,589,193	12,740,679

Source: Korea Securities Supervisory Board.

Table C.4: OTC Trading of Korean Bonds, 1988-90
(Billions of Won)

Year	Item	Government Bonds		Municipal Bonds		Special Bonds		Financial Bonds		Corporate Bonds		Total	
		Offer	Bid	Offer	Bid	Offer	Bid	Offer	Bid	Offer	Bid	Offer	Bid
1988	Securities Companies	2,600.1	1,966.1	235.9	235.9	3,100.7	2,443.8	11,700.4	6,298.3	2,875.9	1,825.5	20,512.9	12,769.6
	Short-term financing	198.3	145.1	-	-	217.2	204.9	6,467.6	4,972.6	-	-	6,883.1	5,322.7
	Total	2,798.3	2,111.2	235.9	235.9	3,317.9	2,648.7	11,270.9	11,270.9	2,875.9	1,825.5	27,396.1	18,092.3
1989	Securities Companies	2,324.1	1,105.3	226.9	286.1	1,366.4	890.7	14,675.4	8,218.3	4,126.4	2,157.0	22,719.3	12,457.5
	Short-term financing	433.4	386.2	-	-	-	-	12,028.1	10,006.6	5	-	12,462.0	10,392.9
	Total	2,757.5	1,491.5	226.9	286.1	1,366.4	890.7	26,703.5	18,224.9	4,126.9	2,157.0	35,181.3	23,050.4
1990	Securities Companies	3,769.1	1,254.2	492.4	382.1	854.4	401.9	11,969.5	6,087.6	6,511.1	3,423.9	23,596.5	11,549.6
	Short-term financing	402.6	355.4	-	-	-	-	12,013.8	10,248.6	289.0	291.6	12,705.3	10,895.7
	Total	4,171.7	1,609.6	492.4	382.1	854.4	401.9	23,983.3	16,336.2	6,800.1	3,715.5	36,301.8	22,445.3

Source: KSDA, Securities, December 1990

Table C.5: Overseas Convertible Bonds and Bonds with Warrants

Issuer	Convertible Bonds											
	Sam Sung Elect.	Daewoo Heavy Ind.	Yu Kong	Gold Star	Gae Hun Media	STC Corp.	Dong Ah Const.	Sam Ik Akki	Miwon	Sunkyong Ind.	Sammi Steel	Hyundai Motor
Date of Issue	Dec. 19, 1985	May 23, 1986	July 15, 1986	Aug. 11, 1987	Oct. 4, 1988	Jan. 3, 1990	Feb. 14, 1990	Dec.31, 2004	July 11, 1990	Sep. 14, 1990	Nov. 8, 1989	Feb. 23, 1990
Date of Maturity	Dec. 31, 2000	Dec. 31, 2001	Dec. 31, 2001	Dec. 31, 2002	Dec. 31, 2003	Dec. 31, 2004	Dec. 31, 2004	Dec. 31, 2005	Dec. 31, 2005	Dec. 31, 2005	Nov. 8, 1994	Feb. 23, 1995
Date of Conversion	22 months after issued	18 months after issued	Same	Same	Same	Same	Same	Same	Same	Same	18 months after issued	Same
Conversion Premium	30-100%	50%	55%	115%	65%	105%	70%	75%	50%	45%	85%	110%
Amount Offered	US$ 20 mil.	US$ 40 mil.	US$ 20 mil.	US$ 30 mil.	US$ 30 mil.	US$ 30 mil.	US$ 50 mil.	US$ 30 mil.	US$ 30 mil.	US$ 40 mil.	US$ 50 mil	US$ 70 mil.
Interest Rate	5%	3%	3%	1.75%	1.75%	1.25%	1.25%	1%	1.75%	1.5%	1.25%	1%
Lead Manager	S.G. Warburg	Nomura	Goldman Sachs	Merrill Lynch	Citicorp, Daewoo	CSFB, Hanshin, Coryo	SBC, Dongsuh	BZW, Daiwa	Morgan Stanley, Daishin	Nikko, Ssangyong	Merrill Lynch, Dongsuh	CSFB, Daiwa, Hyundai

Note: All issues listed on Luxembourg Stock Exchange.
Source: Korea Stock Exchange, 1991.

Table C.6: Primary Bond Market Activities in Selected Asian Economies, 1987-91
(Billions of US$, Equivalent)

	1987	1988	1989	1990	1991
HONG KONG					
Government Bonds	none	none	none	none	0.08
Corporate Bonds	0.27	0.15	0.15	0.10	0.09
Total	0.27	0.15	0.15	0.10	0.17
KOREA					
Government Bonds	16.25	29.88	36.34	37.78	32.71
Municipal	0.11	0.17	0.25	0.30	4.38
Financial Debentures	1.65	2.60	2.86	5.95	10.09
Corporate Bonds	4.03	6.20	10.24	15.49	16.79
Total	22.04	38.85	49.69	59.52	63.97
MALAYSIA					
Government Securities	3.43	2.74	1.84	1.91	1.29
Corporate Debt	0.07	0.47	0.60	0.64	0.77
Cagamas Bonds	0.56	0.44	0.46	0.15	-
Total	4.06	3.65	2.90	2.70	2.06
SINGAPORE					
Government Securities	15.16	1.87	2.30	1.06	n.a
Corporate Debt	1.38	0.95	1.19	0.94	n.a
Total	16.54	2.82	3.49	2.00	n.a
TAIWAN					
Government Bonds	1.936	2.643	2.067	0.454	0.081
Central	1.165	2.290	1.682	-	0.069
Provincial	0.175	0.248	-	0.442	0.010
Municipal	0.150	0.105	0.385	0.012	0.003
Corporate Bonds	0.414	0.337	0.126	0.601	0.008
Government Enterprises	0.333	0.213	0.076	0.483	0.006
Private Enterprises	0.081	0.124	0.050	0.119	0.002
Financial Debentures	n.a	n.a	n.a	n.a	0.006
Total	2.350	2.980	2.193	1.055	0.089
THAILAND					
Government Bonds	1.165	0.812	0.629	0.267	n.a
State Enterprise Bonds	0.068	0.087	0.243	0.264	n.a
Corporate Bonds	0.100	0.020	0.033	0.216	n.a
Total	1.333	0.919	0.905	0.747	n.a

Sources: OECD, "Fixed-Income Securities Markets of Six Dynamic Asian Economies, by S. Ghon Rhee.
The Securities Journal (December 1991) Stock Exchange of Hong Kong Ltd.
Monthly Statistical Bulletin (April 1992), Bank of Korea.
Summary Statistics of Securities Market (January 1991), Securities Exchange Commission (written in Korea).
Annual Reports 1991, 1990, 1989, Bank Negara Malaysia.
Investors Digest (January 1992) Kuala Lumpur Stock Exchange
Annual Reports 1990/1991, 1989/1990, 1988/1989, Monetary Authority of Singapore.
Various issues of Financial Statistical Monthly (April 1992, December 1991, and November 1991), Central Bank of China.
Annual Reports 1990 and 1989, Bank of Thailand.
Thailand Financial Sector Study (May 1990), The World Bank.
DAEs Written Responses to OECD Questionnaire

Table C.7: Secondary Markets in Selected Asian Developing Economies
(As of December 1991)

	Hong Kong	Korea	Malaysia	Singapore	Taiwan	Thailand
A. Market Size (US$ billion)	122.80	176.93	86.13	n.a	140.94	41.04
Debt Securities Outstanding	1.07	80.82	26.90	n.a	17.29	5.78
Government bonds	0.08	42.39	24.01	5.94	13.50	5.65
Corporate bonds	0.99	38.43	2.89	n.a	3.79	0.13
Equity market Capitalization	121.73	96.11	59.23	58.59	123.65	35.26
Per Cent of GNP (%)	150.60	65.34	189.34	n.a	75.24	51.13
B. Trading Volume (US$ billion)						
Debt Securities	0.34	2.76	3.79	n.a	145.44	0.0082
Government bonds	0.31	1.83	2.83	n.a	145.36	0.0030
Corporate bonds	0.03[a]	0.93	0.35	1.59	0.08	0.0052
Common Equity	42.84	82.24	11.03	17.14	376.03	30.30
C. Turnover Ratio (%)						
Debt Securities	23.39	3.41	14.09	n.a	841.18	0.14
Government bonds	406.70[b]	4.32	11.78	n.a	1,077.00	0.05
Corporate bonds	3.06	2.41	12.20	n.a	2.11	3.88
Common Equity	35.20	85.57	18.62	29.28	304.11	85.94

Sources: OECD "Fixed-Income Securities Markets of Six Dynamic Asian Economies" by S. Ghon Rhee.
The Securities Journal (December 1991), Stock Exchange of Hong Kong Ltd.
Fact Book 1992, Korea Stock Exchange.
Investors Digest (January 1992), Kuala Lumpur Stock Exchange.
KLSE Statistics 1991, Kuala Lumpur Stock Exchange.
Annual Report 1991, Bank Negara Malaysia.
Fact Book 1991, Stock Exchange of Singapore Ltd.
SES Journal (January 1992) Stock Exchange of Singapore Ltd.
Annual Report 1990/1991, Monetary Authority of Singapore.
Fact Book 1992, Taiwan Stock Exchange Corporation.
Quarterly Review (October-December, 1991), Stock Exchange of Thailand.
Monthly Reviews (December 1991) Stock Exchange of Thailand.
DAEs Written Responses to OECD Questionnaire.

[a] This includes only trading through the Stock Exchange of Hong Kong and does not include over-the-counter trading.

[b] This is an underestimation as trading in government bonds only commenced in November 1991.